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**college
physical
education
association**

60th

Annual Proceedings

1957

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1957

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COLLEGE PHYSICAL EDUCATION ASSOCIATION

PRESIDENT'S ADDRESS

1956

THREE SCORE YEARS

Ernest B. Smith

UNIVERSITY OF GEORGIA

It is the usual practice for the President to include in his address the activities of the past year and to hazard some predictions for the future. There have been a few exceptions to this procedure and it is my desire to also depart from the historical traditions. I will report the activities of the past year in the business meeting Friday afternoon, but this afternoon I want to spend the few minutes allotted me discussing The Road an Organization Travels, or more specifically, The Road Our Association is Traveling.

The desire to depart from the usual procedure grew out of three things; first, the realization that our Association is sixty years old. Secondly, the work of the Function and Structure Committee and thirdly, events that have occurred this year. Interestingly enough, our age, the Function and Structure Committee, and the current events fit into a well-molded pattern. We may not be aware of this pattern, yet in my opinion, it is of great importance to us.

The Proceedings you, as members, will receive the first of the year, will be the sixtieth Proceedings. If we were discussing an individual who was sixty years old we would agree, I believe, that he was getting well along in years. According to the life cycle of a human being, he has lived more than two-thirds of his life. He can expect ten more years, more or less, but that's all. He has a definite life span. There is a finality and we know it.

But what about an Association? I realize that we cannot compare the life of an organism to the life of an Association, or institution or a nation, and we should waste no time in attempting to draw any analogies, yet, among many questions that occurred to me, there seem to stand out more clearly in my mind these: How old is sixty years in the life of an Association? Is there an Association life cycle, and if so, is it definite, and can we determine the characteristics of each stage in this cycle? In so doing can we determine our own Association's position?

Kolb and Brunner, in The Study of Rural Society* state, "Like other living things, groups follow cycles. These cycles consist of rather definite stages through which they pass, the periods being of long or short duration, according to the nature of the group, its central interests and its surrounding conditions."

Upon close study it emerges that the "cycle" being referred to here is the old familiar growth-death curve used to represent the path traveled by any living unit from its beginning to its eventual end. Such a tool with such universal application must, of necessity, be like a monkey wrench, adjustable to the task at hand. That is, when describing the normal life cycle of the contemporary "average" American male, the cycle would extend over a period of approximately seventy years with four sub-stages, infancy and dependency of say two years; rapid growth period lasting for another twenty-odd years; maturity extending from that point into late middle age; and decline, extending all the way to the onset of inevitable death.

The association of the tool as a description of the life of an organization brings out some comparisons, but also some contrasts. Kolb and Brunner called the four stages, in this instance, the period of STIMULATION, during which a few people are planning together to form the group, involving a few additional persons in the idea, settling upon rules, structure and procedure. This stage corresponds to INFANCY in the human life. The second stage they called RISE, during which large numbers of additional persons are becoming affiliated with the organization and its meaning. The third stage, corresponding to MATURITY in the human, they called the CARRYING-ON stage. It is during this stage that the organization carries on its work, without a great increase in numbers, without doing anything especially exciting. They are just "carrying-on" with the programs and activities for which the group came into existence. While in the human this stage has a fairly definite time limitation; in the Association there is not such definiteness. An organization, such as the Masonic Lodge, may remain in this state for hundreds of years, others may pass through it in a few months or a few years. But the point here is that the organization will, like the human, eventually enter the DECLINE stage--which will end in death. Unlike the human, death of the organization is not inevitable at any given time, because an organization or association is a structure, a set of common understandings and agreed-upon principles and behavior patterns which exists separate and apart from any single set of individuals. Therefore, specific individuals can come and go, even die, but the organization CAN CONTINUE TO EXIST AND FUNCTION.

Kolb and Brunner specify certain signposts which may indicate that the organization is entering the stage of DECLINE, and also indicate some of the alternatives to death of the organization. I will return to these points in a few moments.

*Kold, J. H.; Brunner, E. D.: A Study of Rural Society, Houghton, Mifflin Co., Boston.

But allow me to apply quickly the idea of the life cycle to our own Association.

The first phase or period, STIMULATION, is the inception period. Dwight Sanderson in Rural Community Organization* states, "Organizations usually arise in response to recognition of some common need..." and this is the story of our beginning. Several people met to discuss mutual problems. During the meeting someone proposed the formation of a formal organization. The proposal was acted upon and a new organization was born. It was called, "The Society of College Gymnasium Directors". Dr. Glenn Howard tells the story in his 1951 review of the History of the College Physical Education Association.

Stimulation periods, like infancy in humans, are usually short. Our stimulation period was not unusual and it was in the second period "Rise" within a brief time. During this second period we find that people who never had thought of an organization clamored to get in. To meet this demand it was voted in 1909 to change the name of the Association to The Society of College Directors of Physical Education.

In the meantime, the organization was becoming set, officers were elected, a constitution was drawn up specifying the officers and terms of office and the number of meetings per year. Committees were appointed and the pattern of the organization became "fixed"; ideals and purposes were codified, customs and precedents were set and the method of procedure was established from that time on.

Again referring to Dr. Howard's report we find that later our membership, our purposes and objectives were broadened and additional committees were appointed to meet the increased needs of the members; and again our name was changed to the present name, The College Physical Education Association. Loyalty was established to a marked degree. This point was brought out by Dr. Elmer Mitchell in his President's address, 1954 — quote: "The one thing possibly above all others, that has impressed me as I have looked over the records of our Association has been the way the older members in it have kept on working..." This high esprit de corps actually assisted the Association over a crucial period that comes to every organization after the newness wears off and the force of stimulation has gradually spent itself and carried it into the third period, the CARRYING-ON period.

It is in this period the organization has settled down to the "humdrum" of everyday work. There is no need for any great stimulation, any great effort. The needs of the members seem to be fully met. The constitution has been established, setting forth the officers, term of offices, committees and the handling of the business of the association. Everything is going so smoothly it seems, to the members at least, the organization can go on and on. This period would seem comparable to a new car — everything works smoothly, almost noiselessly and certainly without mechanical disturbances. But this car can become a pile of junk within a few moments if proper caution is not used when it is being

*Sanderson, Dwight. John Willey & Son, Inc.: London.

driven. And this is so with an organization, it must be navigated skillfully and carefully or it too ceases to exist; in other words the Association finds itself in this DECLINE period and eventually dies.

In many instances organizations did not realize the approach to the last period until it was too late. In the minds of many of the members the organization was not really dead, it still had its constitution, its officers and even money in the treasury, but nevertheless, it was in the DECLINE stage.

A few moments ago I mentioned that there are certain signposts along the way, which if not read and heeded, would precipitate the Association into this DECLINE stage. On the other hand, if these signs are heeded the organization will live on and on.

One of these signposts reads: "Needs and Demands are constantly changing." This is a true statement for every organization. People even tire of pie after a while and desire something else. Members are no different, and this changing of needs must be carefully watched. Sometimes the members vote for the proposed changes, sometimes the proposal loses. Many times these proposals are more important than it is realized. It may mean a new lease on life.

A second signpost reads: "There is a Tendency for an Organization to grow up with its members." As a new organization, it begins life with people unfamiliar with its ways. They gradually mold it to conform to their ways of doing things. The leaders gain confidence gradually and their efforts become more and more successful. However, new people coming in later cannot have this experience. They must take things more largely as they find them. In many cases this they refuse to do, particularly of the younger generation and it is not unusual to find separate organizations for the various age groups.

Another signpost reads: "Special Interest Groups". On the surface there seems to be nothing alarming about this sign. Every organization of any size has members with different interests. Individuals with the same interest gather in a group. To attempt to satisfy special interest groups an organization will do many things; one of the most popular is to organize a section. This section will meet, elect officers, usually a chairman, vice-chairman and secretary. This section will schedule interesting programs, not only for the benefit of its own group but to attract other individuals. Interest grows; another room is needed and more time is requested on the program. Now there is a request for two section meetings which leads into a very short step. Someone suggests the section should organize its own association.

Another signpost has the words of Toynbee, from his book a STUDY OF HISTORY,* "Resting on One's Oars". In Toynbee's words, "This is the passive way of succumbing to the genesis of creativity. Examples can be given from the dual of David and Goliath to the French Maginot Lines". To Toynbee there is the beat of an elemental rhythm whose variations we have learned to know as challenge-and-response, with-

*Toynbee, Arnold J.; A Study of History; Oxford University Press

drawal-and-return, rout-and-rally, but in listening to it we have recognized that this rhythm is neither the fluctuation of an undecisive battle or the cycle of a treadmill; no, it is the rhythm of the organization that continues to live on and on.

There are these signs and more. Reading these signs and attempting to interpret them in the light of our Association, it is my candid opinion that CPEA is in the midst, not near the end, of the CARRYING-ON stage. This opinion was reached, first, by the activation of the Function and Structure Committee. Forming this Committee was, and is, an attempt to "Meet the needs and demands of our Members". The report by Dr. Daniels Friday afternoon will forcibly bring to your attention, first, that there have been an awareness and concern about these changes and secondly, the direct action, through recommendations to the members, to meet these changes. This Committee has done a tremendous and superb job and I am confident that you will feel the same way that I do.

Secondly, a review of this Convention's program and membership of its committees and officers will convince one that this Association believes in the principle which includes old and young in the program.

Thirdly, there are few organizations that have only one group of people, one interest. We have many members and many interests. Again, if one will glance through the program he will find the needs of each interest group are met, and met well. Of course, as Dr. Mitchell pointed out, we do have a high degree of loyalty, which, in itself, offers protection to the Association.

Fourthly, there are so many activities "cooking", there are so many problems unsolved, that it isn't possible for us to "Rest on our Oars" for many years to come.

So, I say to you again, it seems to me that we are in the CARRYING-ON stage; our membership is increasing, our current activities are numerous and worthwhile, our committees are active, and both new and old members are involved in our planning and action. In other words, I feel that as we are organized our officers and committees are able to evaluate any internal situations which may arise, and that they have both the ability and the group backing to do what will be best for the members of the Association if, and this is a big IF, the Association continues to recognize the needs, and acts on that recognition with eternal vigilance. We must first be conscious that the continued life of our Association is NOT automatic, but that it must be worked for; secondly, we must be conscious of the signposts which indicate the beginning of a decline, and third, we must be willing and able to shift our programs, activities, and even objectives to meet the ever-changing needs and interests of a changing membership within ours, a rapidly changing professional field. This willingness can be maintained only by remembering that the maintenance of the Association is not the end goal in itself, but is only an intermediate goal, to be achieved only for the purpose of meeting an ultimately more important goal; that of continuing to meet the common needs of its members. We must be over alert to those needs.

SOME MEANINGS OF AMERICAN SPORT

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Two considerations were paramount in the phrasing of this specific topic. First, sport, or, for that matter, any human occurrence cannot be interpreted by the sociologist without reference to the meaning it has for those caught up in it. The place of sport, its personnel, and following in America today is not comprehensible either as the capricious outgrowth of man's distinctive physiological make-up, as merely another product in an unending chain wrought by "social forces", or as some compromised resultant of cultural and constitutional "vectors." Second, the very notion of meaning can be informed by the sociological study of behavior. Indeed, from the sociological point of view, the meaning of any event is rooted in collective response, in the behavior that gets mobilized around the event.^{1/} This is not to say that philosophical considerations of meaning are without validity, or that psychological claims to the effect that the meaning of sport is fixed in the "underlying" motives or "overriding" gratifications of the player and the fan are baseless. Such assertions merely betray alternative perspectives not quite relevant for the design of sociological study. Those who have adopted the alternatives are best fitted to test the validity of the propositions they may formulate. Viewed in behavioral terms, the meaning of philosophy or psychology is comprised in part exactly by collective quests for definitions or motives, as the case may be— forms of behavior that are, incidentally, not at all dissimilar.

Sport, a variety of play, is apprehended here as fundamentally meaningful. It is symbolic, and there are those who would equate "symbolic" and "human," arguing that the evolutionary character of the human species derives at once from its biological continuities with the lower (or other) animals and its emergent behavioral discontinuities manifested as "symbolic transformations."^{2/} We can see this clearly by contrasting animal and human play. Although all young animals gambol and fisk about, they never play "house," or "cops and robbers." Their play is not representative as is human play where the human

^{1/} The perspective is essentially that presented in George Herbert Mead, Mind, Self, and Society (Chicago: University of Chicago Press, 1934).

^{2/} A phrase employed by Suzanne K. Langer in her excellent book, Philosophy in a New Key (Cambridge: Harvard University Press, 1952). The general tenor of this interpretation is also detailed in Ernst Cassirer, An Essay on Man (New Haven: Yale University Press, 1947).

being literally represents himself as a player. Nothing that players are often consumed, Jan Huizinga has made the point explicit:

The "differentness" and secrecy of play are most vividly expressed in "dressing up." Here the "extra-ordinary" nature of play reaches perfection. The disguised or masked individual "plays" another part, another being. He is another being. The terrors of childhood, open-hearted gaiety, mystic fantasy and sacred awe are all inextricably entangled in this strange business of masks and disguises.^{3/}

It should not overtax the imagination to accept the costumes of children's play and the uniforms of adult games as impressive evidence for the contention that sport is symbolic and, therefore, distinctively human. Sport, even viewed solely as a play form, is representative in spite of, not because of, man's continuity with the other species.

There is also more than first meets the eye in the similarity of the verbs "dress" and "address," for, whenever we clothe ourselves, we "dress toward" or address some audience. In so far as it is symbolic, sport is addressed. When the player "suits up," an audience is implicitly there, else his costumed entry on the field of play is meaningless. For the meaningfulness of any symbol is tested by the ability of that symbol to call out in its recipient a set of responses already anticipated in part by the producer of the symbol.^{4/} To bring sport within the compass of sociological study as a symbol, therefore, demands that we attend not only to those who are engaged in its production or performance, but also to the audience. Since the production of sport is a collective enterprise, there is an immediate division of audiences into those "on the inside" and those "on the outside." The athlete "suits up" for the other players and personnel as well as for the spectator. Consequently, even a minimal analysis of the meaning of sport must take into account the social relationships among its producers and between the producers and the spectators "on the outside."

A final observation is needed to complete this introduction. The very presence of an audience disturbs the play of sport, inducing the dis-play of the players.

3/ Jan Huizinga, Homo Ludens: A Study of the Play-Element in Culture (London: Routledge and Kegan Paul, Limited, 1949), p. 13.

4/ Were my words in this place to call out none of the responses in you that they have already summoned forth in myself, this paper would be "nonsense," at least in the context of our relationship. I would like to add that I use the term "producer" to designate the one who leads the symbol forth. Actually, the producer of the symbol is also its recipient—one responds to his own words, but I do not wish to complicate the analysis further.

Representation means display, and this may simply consist in the exhibition of something naturally given, before an audience. The peacock and the turkey merely display their gorgeous plumage to the females, but the essential feature of it lies in the parading of something out of the ordinary and calculated to arouse admiration.^{5/}

In the passage cited, Huizinga has laid bare a fundamental tension in the performance of play: play as a symbolic production gives rise to the counter-production of display. Precisely because it is symbolic or representative, the performance of every play form confronts the players with an objective dilemma: to play or display.^{6/} Too great an emphasis upon play may constrict the mood of the game; an overemphasis upon display may destroy the value. If the game is to continue, the conflicting demands must be reconciled—a precarious matter, for surrender to either demand by repudiating the other can “spoil the sport.” To maintain the play at the expense of display results in a preoccupation with rules and procedure and a subsequent “blanketing” and “watering down” of the collective performance; to maintain the display at the expense of play results in a flaunting of rules and spectacular innovation so that the game, itself, is removed from the purview of the players by the demands of the grandstand. In professional wrestling, for example, it is not only the rules that are flaunted in the display, but the keeper of the rule—the referee—is now a standard part of the performance. The

5/ *Ibid.*, p. 13. Huizinga misses the necessary distinction between the symbolic nature of dress and the signal character of plumage. The cock does not “represent” his intentions by “addressing” the hen, for example, after having first preened before some private mirror. His display is not “calculated to arouse admiration” on the part of the hen. The “fuss and feathers” are signals of mating, not symbols of courtship. Moreover, although he observes that play always implies display, Huizinga does not comprehend the tension that is generated by their concurrence. Play is tension or contest for Huizinga, and he often confuses or interchanges the two in his analysis. Thus, he seldom observes that play is contested, or that the contest is merely one form of play. For a supplement to Huizinga’s analysis of play, see Roger Callois, “The Structure and Classification of Games,” *Diogenes*, No. 12 (Winter, 1955), pp. 62-75.

6/ Play and dis-play were first proposed as an antinomy in the writer’s “American Sports—Play and Dis-Play,” *Chicago Review*, IX (Fall, 1955), pp. 83-100. Despite the title, I did not place such emphasis upon the tension as I am placing here. Recently, I have come to suspect that the theme runs through every instance of human interaction and is not at all confined to behavior that is ostensibly play, but this observation represents, at best, merely an extension of Huizinga’s original insights.

"second-guessers" and "Monday morning quarterbacks" in the bleachers and the "Philadelphia lawyer" on the bench are as much "spoil-sports" as the grandstanding football player or the basket-hungry hoopster. They all impede the play. A nice instance of the dilemma is provided by the stereotyped antagonisms ascribed popularly to the contract bridge of married couples — the husbands destroy the mood of the game; the wives, its value. Perhaps the recommendation that bridge and marriage be separated in practice betrays something other than the humor of the situation. I submit here that this single tension between play and dis-play is, either implicitly or explicitly, at the bottom of much current concern over the state and direction of American sport.

In this sense, one meaning of American sport is comprised precisely by the collective dissatisfaction it has mustered. There is hardly a game or technicality of play that has escaped the harshly critical view of the discontented—the theatrics of the wrestling arena, university athletics, roughing the quarterback, the width of the free-throw lane, the height of the backboard, the matching of boxing styles, the morality of the pari-mutuel, "spectatoritis," the spinning reel, and the telescopic sight—to mention only a few of the critics' preoccupations. Were we to accept the verdict of the moralizers, we would have to agree that American sport has been spoiled. Yet, this very dissatisfaction also implies a pervasive and positive appraisal of sport in America. Most of us will readily agree that sports must continue, even though we will acknowledge, at the same time, that many of them have lost their value as a source of dignity. It is my contention that the current ambivalence toward sport in America is a function of its recency in American history and ignorance of the range of its current consequences. Therefore, in this paper, I wish to accomplish two main tasks: first, to place American sport in the context of social history; second, to present some preliminary research results on the behavioral implications of sports for its audience and its casual participants.

Reflections on the Past

Ignoring for the moment the fury of the controversy, we might observe that American sport has emerged only recently into its present place of prominence in public discussion, and that its emergence followed a long and difficult struggle. All ascendant activities are scrutinized closely and are, consequently, more vulnerable to widespread censure than established practices. Western civilization has experienced three contrasting types of social organization in the last five hundred years: a system of landed estates, a system of classes organized around man's relationship to the production processes of an industrial society, and a pattern of masses organized around the consumption processes—which seems to be the emerging form in this country. These changing forms of social organization have had profound im-

plications for the meanings of sport and play, i.e., for the behavior that has been and is mobilized around these representations.

Play, in any form, seems not to have been so problematical in the period of the estates, although I am inclined to be sceptical of most portrayals of social life in those circumstances—many nineteenth century sociologists have romanticized the era in their revulsion against the excesses of industrial capitalism in their day. Careful examination of the elder Brueghel's portrayals of bucolic celebrations suggests that all was not well beneath the surface gaiety, and history tells us also that the aristocracy of the time viewed such sport as football, golf, and bowling as intolerable diversions from the practice of military skills. Any adequate account of the sociological character of sport must probe more deeply and accurately into that earlier period than contemporaries have done, but, in this place, I can only treat (and then in too cursory a manner) the contrast between the meaning of sport today and yesterday.

If it may be said to have existed at all in the eighteenth and early nineteenth centuries, certainly sport never commanded the general and pervasive interest it commands today. Play, itself, of which sport is a variety, was linked with the leisure styles of the "classes" who effectively stilled the play, for example, of the British industrial workers, if only by denying them space for their games. Those able English historians, J. L. and Barbara Hammond, have examined the way in which the rise of industry transformed countryside into industrial town. The inclosure laws facilitated the industrialization process, but, at the same time, robbed the English of their playgrounds. The Hammonds provide a striking illustration:

We will take the case of Basford, a small framework-knitting town a few miles north of Nottingham, with 1,200 acres of forests, commons, and waste lands at its doors. Before 1793 the inhabitants probably never thought about their playgrounds or wondered how they had been provided; they took them as a matter of course. After 1793 there were no playgrounds to think about, for an Inclosure Act swept the whole area into private hands. The inhabitants of Basford did not easily adapt themselves to the changed conditions. Fifty years later it was stated (before the Heath of Towns Commission) that the want of open land for recreation was "a fruitful source of bickering and recrimination between the young men of the parish and the owners and occupiers of lands, trespasses on the part of the young men, for the purposes of cricket-playing and other games, being very common."⁷

⁷/ Hammond, J. L., and Barbara Hammond, The Bleak Age (Middlesex England: Penguin Books, 1947), p. 78.

Nor were the constrictions of play confined only to the inclosures of open areas:

A study of the local papers shows how great a strain a life without playing-fields or amenities of any kind put upon the English temperament. Towns pass laws to forbid children from playing with tops in the streets; correspondents write to complain of the flying of kites, and magistrates impose severe fines on men and boys for running races on the turnpike roads, on the ground that this practice has become a general nuisance.^{8/}

As Max Weber has shown, the rise of industry (emphasizing the distanciation of play from work) was facilitated and underwritten by the Protestant ethic.^{9/} The Methodist protest affords only one example:

A moral revolt is always apt to answer extravagance by extravagance. The Methodist revolt was no exception. It was a revolt against dissolute manners, and it demanded ascetic manners. Wesley was proud, it will be remembered, that the Methodists abstained from "reading plays, romances, or books of humor, from singing innocent songs, or talking in a gay diverting manner." He said that to educate a man you must break his will, and when he drew the rules for his school at Kingswood he said that he allowed no time for play, because he who plays as a boy will play when he is a man.^{10/}

Whether or not the separation of American work and play was effected in this degree is moot. For example, James Bryce, the insightful English student of American life, observed:

In Connecticut and Massachusetts the operatives in many a manufacturing town lead a life far easier, far more brightened by intellectual culture and amusements than that of the clerks and shopkeepers of England and France.^{11/}

And, in a valuable recent discussion of recreation in America, the sociologist, Arnold Green, examines the earlier interpenetration of the themes of work and play:

^{8/} Ibid., p. 86.

^{9/} Max Weber, *The Protestant Ethic and the Spirit of Capitalism*, translated by Talcott Parsons (London: George Allen and Unwin, Limited, 1930).

^{10/} J. L. and Barbara Hammond, *op. cit.*, p. 123.

^{11/} James Bryce, *Social Institutions of the United States* (New York: Grosset and Dunlap, Publishers, 1891), p. 223.

Although the almost universal desire to play was by no means quelled, for most adults in that era recreation was a byproduct of work: utilitarian activities like court time at the county seat, quilting parties, militia musters, and barn raisings combined work or civic duty and play.^{12/}

Yet Weber, a German sociologist, plumbed the maxims and aphorisms of Benjamin Franklin to construct his ideal type of the Protestant ethic, and, if it is true that the early American ideology incorporated Protestant views, it is worth noting once more that the American Protestant and Catholic churches have always maintained contrasting appraisals of lotteries, gambling, or gaming. Not until the 1920's did the American Protestant churches relax their rules toward such games, and then with the stipulation that they be played for amusement only. "Risk and gain were cemented in the context of work, never in the context of play."^{13/} In an extensive survey undertaken twenty-five years ago, Steiner placed the "first important development of interest in athletic sports and games . . . in the decades immediately following the Civil War."^{14/} However, the transformation of play into display implied by the rise of sports was accomplished exclusively at first. Steiner maintained that the period up to the end of the nineteenth century in this country "may be characterized as an era when athletics were brought within the reach of the few."^{15/} To parody Veblen, sport in nineteenth century America seems precisely to have been the monopoly of a leisure class, not the preoccupation of a leisure mass. Although many early Americans did play at some of their work (most in rural areas), the play was justified for them in terms precisely of its facilitation of work activities and never on its own terms. The Protestant ethic precluded play as a source of personal dignity and esteem for most nineteenth century Americans.

I assert that the rise of sport in America is a concomitant of the diminution of social distances appropriate for the industrial society. For it seems that sport may be viewed precisely as some linkage of play and the work form. So long as play and work are kept apart, or one form is subordinated to the other, sport has no major role in social life. If sport does comprise a linkage of play and the work form, there

^{12/} Arnold W. Green, Sociology (New York: McGraw-Hill Book Company, Inc., 1956), p. 480.

^{13/} Gregory P. Stone, op. cit., p. 90.

^{14/} J. F. Steiner, "Recreation and Leisure Time Activities," in Report of the President's Research Committee on Social Trends, Recent Social Trends in the United States (New York: McGraw-Hill Book Company, Inc., 1933), p. 925.

^{15/} Ibid., p. 926.

are at least two sport modes.^{16/} First, there are those sports that mark transformations of the play form into work—the so-called professional and otherwise subsidized athletics. Steiner hit upon this linkage in his earlier study, when he observed that “athletic sports are dominated by a rigorous and exacting spirit of work rather than of play,”^{17/} but he failed to develop the point. Second, there are transformations of the work form into play represented by hunting, fishing, camping, or the “do-it-yourself” activities.

Spectator sports seem to dominate the former mode; participant sports, the latter. Thus tendencies toward display are aggravated as play becomes work, for the paying audience sustains the activity. The intrusions of the spectator into the productions of this sport mode are represented much more subtly than spectator statistics and the increase of stadia, ball parks, and field-houses reveal. For instance, note the “career” of the backboard in basketball. First, constructed of chicken wire, the backboard functioned to prevent the spectator from interfering with the game. When the backboard became a board in fact, it was incorporated into the play. The recent change from wood to glass symbolizes nicely the admission of the spectator into the performance. Tendencies toward play are aggravated as work becomes play, with the resultant preoccupation with rules and procedure. In this regard, we would note the tremendous proliferation of literature dealing with hobbies in America—“Hi-Fi,” “woodworking,” and the rest—but the tendency has become even more universalized as Americans seem now to be preoccupied with “How to Do” in general.

Were we to have studied sport as a play form in the industrial society, we would have followed the leads of Marx and Freud, looking for its meaning in the parent-child relationship or the work relationship. Thus, play was, perhaps at some earlier time, a childish thing or a way of facilitating work. These metaphors, however, seem to apply no longer. In the mass society, we are stopped before we begin our analysis. For one thing, we can no longer be certain that play is identifiable. For another, as social distance diminishes, social relationships become diffuse and polymorphous. We are not certain where we should look for the contemporary meanings of sport, but our very notion of sport as meaningful leads us to the examination of the audience in the hope of unearthing fruitful leads.

Research in the Present

To gather the kind of information that is needed to explain in part the meaning of sport in the mass society, I have initiated empirical

^{16/} This fruitful line of exploration was first suggested by the author's former associate, Joanne B. Eicher, now of the Department of Social Science at Michigan State University.

^{17/} J. F. Steiner, *op. cit.*, p. 913.

research. At this time, only a preliminary phase of the study has been completed, and the findings I will present must be accepted as only tentative in nature. Up to this point, one hundred and twenty-seven adults have been interviewed in three widely divergent socio-economic areas of Minneapolis, Minnesota. The sample is properly an "analytic sample" rather than a routine random sample so that comparisons among the three socio-economic strata represented may be facilitated. Roughly equivalent numbers of informants were selected from each of the three socio-economic areas of the city. Half were men, and somewhat more than half were forty years of age or older. Each informant was asked identical questions concerning the kinds of activities looked upon as "sport," the extent to which he discussed sport with others, his favorite sports, his development of loyalties to particular teams and players, his expenditures on sport, and other related matters. The responses have all been tabulated and subjected to a preliminary analysis in the effort to elicit age, sex, and socio-economic differences in the meaning that sport has for these people.

Sport and social solidarity. — The central problem of sociology is the nature of the social bond—how people are held together in association, not only because of their common activities, but also in spite of their diversified behavior. Members of any sport audience or following are at once brought together and set apart by the very fact of their interests. The most apparent mechanism for mobilizing the behavior of people around sport, and, hence, of making sport meaningful, is talk.^{18/} It has been explained this way:

. . . the solidarity of the larger society . . . rests, in part, upon the maintenance of a community of experience among persons. To maintain the community of experience, people must share, as William James put it, both knowledge about and acquaintance with similar salient events. On this basis, they can enter into association without necessarily having been introduced.

Knowledge about similar events is provided by the mass media. One can ask almost any stranger about sports or popular TV programs, and, because the stranger possesses relevant information, the conversation will be sustained, sometimes transformed into a more enduring relationship. Knowledge about similar events makes us available to one another.

Acquaintance with similar events is provided by certain pervasive experiences—the work experience, the military, the courtship, the blizzard of '89. These are marked by a dominant

^{18/} For an example of this kind of analysis in another, but related, area, see Leo Bogart, "Adult Talk about Newspaper Comics," American Journal of Sociology, LXI (July, 1955), pp. 26-30.

mood which mobilizes sympathies or mutual appreciations among those having the experience.^{19/}

Even though they are strangers, those having such critical experiences (they need not have participated together in such experiences) easily enter into relationships with one another. They become mutually available. Knowledge about and acquaintance with sport make Americans available to one another.^{20/} Moreover, such a community of experience is not won only by participation in sport. Spectatorship is both a means of acquiring relevant information and a source of crucial experiences exemplifying a dominant mood. It will not be too long a time before those who saw Joe Louis fight will be universally appreciated by strangers, just as those who saw Dempsey fight are appreciated today.

When we asked the members of our sample how frequently they talked about sports, their responses were not differentiated either by age or socio-economic stratum. However, men and women were significantly differentiated.^{21/} About sixty percent of the men reported that they discussed sport "frequently" or "very frequently" with others, as compared to only about a third of the women. Talk about sport, at least among Minneapolitans, bolsters the male community of experience more than it does the female, although women are certainly making inroads into the male community.

We also asked our informants to relate the different situations in which they discussed sport, and the subsequent analysis revealed interesting differences. Among the men, discussion of sports is most extensive in the middle and lower socio-economic strata. Table 1 shows the relatively more exclusive character of sports talk in the upper socio-economic stratum, indicating that sports may still have the effect of insulating the wealthy from the rest of American society, although it simultaneously incorporates the less wealthy into the society. Yet, this general hypothesis must be qualified in the light of more intensive

^{19/} Gregory P. Stone and Marvin J. Taves, "Research into the Human Element in Wilderness Use," paper delivered at the annual meeting of the Society of American Foresters, October, 1956, to be published in the proceedings of the annual meeting in the American Forester.

^{20/} Note the use of sport information as a means of distinguishing friend from foe in the American ground forces during World War II. Sport information frequently served to identify American soldiers who, for one reason or another, did not know the appropriate password. I also know that information about the World Series was employed by one psychiatrist at least in his preliminary diagnosis of the "mental fitness" of inductees.

^{21/} The Chi-Square test was employed to test the significance of all associations reported here. Our significance level was set at .05. No effort has been made, in this preliminary analysis to represent the degree of association. Unless otherwise specified, all associations reported in the text have met our test of significance.

analyses of the data. For example, about two thirds of the men from every socio-economic stratum reported that they did discuss sports at work. It is in the other areas of social life that sport talk reflects socio-economic differences.

Although only about a fourth of the informants mentioned the sport scene as a context of conversation about sport, significant socio-

TABLE 1

SOCIO-ECONOMIC DIFFERENCES IN EXTENT OF SPORT CONVERSATION AMONG MINNEAPOLIS MEN

Number of Social Situations in which Sports are Discussed	Socio-Economic Strata			Totals
	Upper	Middle	Lower	
None or one	3	3	5	11
Two	11	9	4	24
Three	1	6	7	14
Four or more	2	7	3	12
Totals	17	25	19	61
$\chi^2 = 5.89$		$p < .02^*$		

* The first and second rows and the third and fourth rows were combined in the analysis, as were the second and third columns. Thus, the Chi-Square is for a fourfold table with one degree of freedom.

economic differences, shown in Table 2, did emerge. The sport scene most frequently provided a context for sport conversation in the upper and lower strata of our sample. The use of sport talk to bring together friends and neighbors was reported by about forty percent of our informants irrespective of socio-economic circumstance or sex. However, the younger respondents — those less than forty years of age — more often discussed sports with friends and neighbors than did the older respondents.

Undoubtedly, the most revealing finding in this analysis of sport conversation was provided by reports of the family as a context for sport talk. First, the sex difference was fundamental. More than two-thirds of the women mentioned the family, and this figure compared with only about one-half of the men. Although Table 3 shows an over-all association between socio-economic stratum and family sport discussion, the association was greatest among the women. Less than half the lower-stratum women said they talked about sports with other family members, but seventy-five percent of the middle-stratum women and somewhat more upper-stratum women did bring up sports in family conversation.

Thus, although upper-stratum men do confine their sport talk to fewer social relationships than do middle- and lower-stratum men, they

do not differ significantly with respect to the most frequently mentioned situations--work, friendships, and family. Women, however, differ considerably in the extent to which they discuss sports with family members. These and other findings which will be reported subsequently suggest that the meaning of sport differs fundamentally among women of different socio-economic strata.

Sport seems to be most frequently a family affair for women in the upper reaches of the socio-economic scale. There are undoubtedly several reasons for this, but one important reason is comprised by the fact that sport is linked closely to participation in formal associations and clubs in the upper-stratum. Thus, one-fourth of the upper-stratum women reported memberships in sport organizations; one-twelfth of the middle-stratum women; and no lower-stratum women reported a membership in a sport organization. For the men, the differences are almost as striking -- two-thirds of the upper-stratum men reported such mem-

TABLE 2

SOCIO-ECONOMIC DIFFERENCES IN MENTIONS OF THE SPORTING SCENE AS A CONTEXT FOR SPORT CONVERSATION AMONG MINNEAPOLIS MEN AND WOMEN

Mentions of the Sporting Scene as a Context for Sport Conversation	Socio-Economic Strata			Totals
	Upper	Middle	Lower	
Mentions	12	7	12	31
No Mentions	24	46	26	96
Totals	36	53	38	127

$\chi^2 = 6.35$ $p < .05$

TABLE 3

SOCIO-ECONOMIC DIFFERENCES IN MENTIONS OF THE FAMILY AS A CONTEXT FOR SPORT CONVERSATION AMONG MINNEAPOLIS MEN AND WOMEN

Mentions of the Family as a Context for Sport Conversation	Socio-Economic Strata			Totals
	Upper	Middle	Lower	
Mentions	22	37	17	76
No Mentions	14	16	21	51
Totals	36	53	38	127

$\chi^2 = 5.07$ $p < .05^*$

* The first and second columns were combined in the computation of Chi-Square so that the Chi-Square is for a fourfold table with one degree of freedom.

berships; one-third of the middle-stratum; and only one of nineteen lower-stratum men. I would remind the reader that, despite the sex differences in reported sport association memberships, such memberships are frequently solicited from families rather than individuals. This is all the more true for the wealthy.

The meaning of sport for middle-stratum women betrays a somewhat more "frantic" attitude. In the interview situation, these women rarely exhibited expertise in matters of sport; yet, their efforts to acquaint themselves with the area were characterized by great self-consciousness and resolve. I have the distinct impression that these women are rather compulsively entering into the world of sport--grasping at this among many other straws--to reassure themselves that their marriage is, indeed, "companionate." There seemed to be little intrinsic interest in sport among these informants who, preoccupied as they were with building the family on a foundation of common interests, rarely discriminated among the interests available.

In the lower stratum, women were often employed outside the home. Thus, interest in sports was cultivated in the work situation. It is quite possible that the meaning of sport for lower-stratum women is the same as that for men generally. It serves to strengthen social ties with co-workers and with extra familiar acquaintances. Indeed, female interest in sport in this stratum may function to define and separate even to a greater degree family roles that are already highly differentiated in contrast to those in other socio-economic strata.

Our informants were not only differentiated by the locale and extent of their sport conversation, but also by the sources they employed as a basis for gathering information about sport. Men and women were distinguished by their contrasting ratings of television and newspapers as sources for sport information. Women relied on TV in significantly greater proportions than men, while men generally rated newspapers high as sources of sport information. Among lower-stratum men, greatest emphasis was placed upon TV, magazines, and books as sources of sport information. Middle-stratum men rated newspapers relatively higher than did male informants from the other strata; and upper-stratum men derived their sport information directly -- from attendance at sport contests--more often than men in other strata.

The gamut of sport. -- When the informants were asked what activities they thought of when they heard the word, "sport," almost half as many activities were mentioned as there were informants. Measured by the number of different activities reported, significant differences in the range of activities conceived as sport were revealed in the case of male informants only. The greatest number of activities were reported by men in the middle socio-economic stratum and by the younger men. Included as "sport" were such activities as "relaxing," "dancing," "television," "movies," "wood-working," and "sex," in addition to the more widely recognized games. The inclusion of sex as sport is perhaps apt testimony to the inappropriateness of the Freudian perspective for the interpretation of contemporary American sport. Riesman writes:

Freud viewed work as an inescapable and tragic necessity. . . And sex, too, was for Freud a realm of necessity. He saw it, not as presenting men with a problem to be solved, nor with a game to be played, nor, coupled with love, as a road to human closeness and intimacy, but rather as a "teleological" prime mover, charged with the task of socializing and civilizing men and thus preserving the species. Sex could fulfill this task because of its ability to bribe with an elemental pleasure and to appease with an elemental release. Work was, then, the means by which the species maintains itself while performing its endless procreative mission.^{22/}

Although sex was purchasable in the "sporting houses" of that earlier time, the purchasers were not called "athletes," as the more spectacular shoppers and trappers publicized in the pages of the Kinsey reports are called today.

I have subjected the more frequently mentioned activities to statistical analysis for differences in mentions by the different age, sex, and socio-economic groupings interviewed. Table 4 summarizes the significant differences disclosed. Age differences were only manifested in mentions of swimming, where, as we would expect, those younger than forty years of age mentioned swimming relatively more frequently than the older informants. Among the spectator sports, baseball, boxing, and basketball differentiate the sexes. Men mentioned each of these sports significantly more often than women. Among the participant sports, men mentioned hunting and fishing significantly more often than women, while women mentioned bowling and swimming significantly more often than men. Sports mentioned most often by upper-stratum informants were hockey (a university sport in Minneapolis), golf, and tennis. Middle-stratum informants mentioned football, basketball, bowling, and hunting more frequently than informants in the other strata, while lower-stratum informants emphasized the combative sports of boxing and wrestling. It is worthwhile noting, in this respect, that among Minneapolitans, skiing seems to be the most generalized or mass sport in the sense that there were no age, sex, or socio-economic differences among those who mentioned it. Among Minneapolis men, baseball commanded general attention irrespective of age and socio-economic differences.

The socialization of the person into the sports follower. -- Of course, the mere listing of activities as sport provides at best only a crude index of the involvement of the informant with the activity mentioned. When the respondents were asked whether or not they thought of themselves as

22/ David Riesman, Individualism Reconsidered (Garden City, New York: Doubleday Anchor Books, 1955), pp. 176-177. The larger volume (Glencoe, Illinois: The Free Press, 1954) should be consulted by everyone interested in the contemporary meaning of American sport. On this specific point, the reader should also consult Nelson Foote, "Sex as Play," Social Problems, I (April, 1954), pp. 159-163.

"fans," sixty percent of the men answered in the affirmative and only a third of the women--a significant difference in proportions. Whether or not they designated themselves as "fans," all informants were asked whether they had favorite teams in the area of spectator sports and the

TABLE 4

SUMMARY TABLE OF ASSOCIATIONS BETWEEN MENTIONS OF SPECIFIED ACTIVITIES AS SPORT AND SELECTED SOCIAL CHARACTERISTICS OF MINNEAPOLIS MEN AND WOMEN

Activities	Selected Social Characteristics*			Totals**	
	Age	Sex	Socio-Economic Strata	Num-ber	Per-cent
Football	---	---	M-U-L	95	72.4
Baseball	---	M-F	---	84	66.1
Basketball	---	M-F***	M-U-L***	66	52.0
Hockey	---	---	U-M-L	38	29.9
Boxing	---	M-F	L-M-U	20	15.7
Wrestling	---	---	L-M-U	10	7.9
Golf	---	---	U-M-L	39	30.7
Tennis	---	---	U-M-L	20	15.7
Bowling	---	F-M	M-L-U	22	17.3
Swimming	Y-O	F-M	---	34	26.8
Skiing	---	---	---	17	13.4
Hunting	---	M-F	M-L-U	29	22.8
Fishing	---	M-F	---	40	31.5

*Only significant associations are presented in the body of the table. Categories of informants making most mentions of any specified activity are listed first, those making fewest mentions are listed last, reading from left to right. In the age category those less than forty years of age are designated "Y", those forty years of age or more are designated "O". In the sex category, men are designated "M" and women, "F". In the socio-economic category, those in the highest category are designated "U", those in the middle, "M", and those in the lowest category, "L".

**Totals list number of all mentions made by the 127 informants. Percentages are computed from a base of 127.

***Significant at less than the .10 level, but more than the .05 level.

length of time which designated teams had been favorites. From these materials it was possible to derive varying patterns of socialization into the world of sports.

As we would expect, men develop team loyalties at an earlier age than women. By the time they were adults (twenty-one years of age) most men had formed those loyalties with athletic teams which were described at the time of the interviews.

This early formation and relatively enduring persistence of team loyalties affords partial confirmation of an earlier hypothesis:

Team loyalties formed in adolescence and maintained through adulthood may serve to remind one, in a nostalgic way, that there are areas of comfortable stability in life--that some things have permanence amid the harassing interruptions and discontinuous transitions of daily experience.^{23/}

This hypothesis, however, seems to apply only to men. Most women do not form team loyalties until adulthood, if they form them at all. It is interesting to note in this respect that loyalties to teams are more fundamental than loyalties to players. In every instance of mention of a favorite player by these informants, they reported that the player had been selected after loyalties with a team had been formed. Although most favorite players were selected by the informants after they had reached adulthood, the sex difference remained--forty percent of the men, compared to twenty per cent of the women, still thought of favorites established in adolescence at the time of the interview. Otherwise, there were no clearcut patterns. The adoption of a player as a favorite seems to be more a function of the rise of a "hero" on the general sport scene than of the circumstance of the one who adopts the player as a favorite.

In most spectator sports, then, it is the formation of loyalty to a team that is fundamental. In this regard, there are significant socio-economic differences. Table 5 presents these differences. Loyalties are formed at the earliest ages among upper-stratum informants, next among lower-stratum informants, and last of all among middle-stratum informants. As we shall see, spectatorship is most predominant in the middle-stratum--where socialization into sports followings has been delayed the longest time. Moreover, in the light of our earlier hunches concerning the meaning of sport for women of different socio-economic background, it is instructive to note that more than half the women of the middle stratum had not mentioned team loyalties established before their thirtieth year.

^{23/} Gregory P. Stone, *op. cit.*, p. 90.

TABLE 5

AGE DIFFERENCES IN THE FORMATION OF TEAM LOYALTIES
AMONG MINNEAPOLIS MEN AND WOMEN OF DIFFERENT
SOCIO-ECONOMIC STRATA

Ages at which team loyalties were established	Socio-Economic Strata			Totals*
	Upper	Middle	Lower	
Less than 16 years	9	7	6	22
16-20 years	8	6	8	22
21-39 years	6	17	2	25
40 years and older	3	6	7	16
Totals*	26	36	23	85

$$\chi^2 = 12.92$$

$$p < .05$$

*Forty-two informants did not report favorite teams.

This discussion of the formation of team loyalties must be tempered with the knowledge that not all sports mentioned as favorites were spectator sports. Table 6 provides a summary of age, sex, and socio-economic differences among the more frequently mentioned favorite sports. Older people mentioned football and baseball — spectator sports — more frequently than younger people. Fishing retained the male following suggested in Table 4, and swimming, the female following suggested in the earlier analysis. Football, however, was more frequently mentioned by men than women. Golf retained its characteristic wealthy following, but football was also most frequently mentioned as a favorite by the wealthy, though it had been most frequently mentioned as sport by the middle stratum.

Among the spectator sports mentioned as favorites, then, baseball and basketball were not appraised differently by followings in different socio-economic strata. Football was. In explanation, it must be emphasized that both baseball and basketball are represented by professional teams in Minneapolis; football is not. Consequently, the general hypothesis is proposed that the so-called professionalization of sport is associated with the disappearance of socio-economic differences in — the massification of — the audience. Just as the massification of politics requires the emphasis on display — the surrender of the campaign to Madison Avenue — so does the massification of sport inevitably affect the value of the game.

Spectatorship and participation. — Classifying mentions of favorite sport into broad categories of spectator and participant sport permitted the disclosure that about half the informants volunteering mentions regarded spectator sports as favorites. There were no age or sex differences in these choices, but, although the differences among socio-economic strata were not significant according to our accepted level, they

should be mentioned in passing. Table 7 presents the tendency for spectator preference to be somewhat more characteristic of the middle-stratum informants. Sixty percent of the middle-stratum informants

TABLE 6

SUMMARY TABLE OF ASSOCIATIONS BETWEEN MENTIONS OF SPECIFIED ACTIVITIES AS FAVORITE SPORTS AND SELECTED SOCIAL CHARACTERISTICS OF MINNEAPOLIS MEN AND WOMEN

Activities	Selected Social Characteristics			Totals	
	Age	Sex	Socio-Economic Strata	Number	Percent
Football	O-Y	M-F	U-M-L	24	18.9
Baseball	O-Y	---	---	17	13.4
Basketball	---	---	---	11	8.7
Golf	---	---	U-M-L	11	8.7
Swimming	---	F-M	---	10	7.9
Fishing	---	M-F	---	16	12.6
Others too diverse to analyze	---	---	---	31	24.4
No favorite sport	---	---	---	7	5.5
Totals	---	---	---	127	100.1

TABLE 7

SPECTATOR AND PARTICIPANT SPORTS AS FAVORITES OF
MINNEAPOLIS MEN AND WOMEN ORIGINATING FROM DIFFERENT
SOCIO-ECONOMIC STRATA

Type of Favorite Sport	Socio-Economic Strata			Totals
	Upper	Middle	Lower	
Spectator sport	14	29	16	59
Participant sport	22	19	20	61
No favorite sport*	--	5	2	7
Totals	36	53	38	127
$\chi^2 = 4.26$			$p < .20$	

* This row not included in the computation of Chi-Square.

mentioned spectator sports as favorites, and this may be contrasted with slightly more than forty percent of the lower-stratum informants and slightly less than forty percent of the upper-stratum informants. I mention this finding because of its comparability with the recent findings of a study of leisure in Columbus, Ohio. Alfred C. Clarke found that

The largest proportion of respondents who spent most of their leisure hours as spectators (41.3 percent) occurred at the middle occupational level. This percentage decreased markedly as the upper and lower segments of the prestige continuum were approached.^{24/}

Probably because he was concerned with the study of leisure activities in general rather than the more specific study of sport, his proportions of spectators were somewhat less than those reported here. However, the findings of the two studies taken together would seem to indicate that spectatorship is more prevalent in the vast "middle mass" of our American communities than among the advantaged and disadvantaged few. Consequently, those of us engaged in the study of American sport, originating as we do in the middle segments of the population, have been perhaps oversensitized to the phenomenon of spectatorship.

^{24/} Alfred C. Clarke, "Leisure and Levels of Occupational Prestige," *American Sociological Review*, XXI (June, 1956), p. 305.

Therefore, before turning to a more intensive analysis of spectatorship as a preliminary to my concluding remarks, I wish to examine the character of sport participation among the Minneapolis informants in some detail. Whether or not they regarded participant sports as favorite sports, the informants were asked to classify those with whom they participated in sport activities. Responses were classified as social relationships. The number of relationships mobilized by participant sport was significantly greater among the younger informants than among the older informants, although the significance of the difference is almost completely due to differences in non-participants. Among those participating in sport, age seems not to differentiate the mobilization of social relationships. There was an association approaching significance (between the .10 and .05 levels) between socio-economic strata and the number of social relationships mobilized by participant sport among the men interviewed. The greatest frequency of male non-participants occurred in the lowest stratum, while the greatest social range of participation (involving three or more social relationships in the activity) occurred among middle-stratum men. Upper-stratum men most often mentioned two different types of social relations as sources of companionship in participant sport.

However, it is not the mere number of relationships involved that is of central interest here. It is the type of relationship. Irrespective of age or socio-economic position, about one-fourth of the men recruit sport partners from their work associates; and, irrespective of age, sex, or socio-economic position, somewhat more than half of all informants engaging in participant sport participate with friends outside the family. Again, just as was the case with sport talk, the use of the family in participant sport varies. Only, in this case, the pattern is much more clear.

Table 8 presents socio-economic differences in the use of the family as a source of partners for sport participation. The relationship is positive: the higher the socio-economic stratum of the participant sportsman, the more frequently is the participant sport carried on in the company of family members. In the lower stratum, both husband and wife look for sport companions primarily outside their immediate households; in the upper stratum, women look to the home for sport companions somewhat more frequently than do the men (but half the men do mention the family as a source); but, in the middle stratum, significantly more women confine their sport participation to the family than do men. Over eighty percent of the middle-stratum women participating in sport mentioned the family as a source of sport companionship, compared to only forty-five percent of the middle-stratum male participant sportsmen. Again, a kind of desperate situation is suggested, where the middle-class husband is pulled away from home by sport, while the middle-class housewife strains mightily to pull him back into the home. The data suggest that the women widowed by sport in America are middle-class and that sport merely underscores existing family differences between men and women in the lower stratum of the society

TABLE 8

SOCIO-ECONOMIC DIFFERENCES IN REFERENCES TO THE FAMILY
AS A MATRIX FOR PARTICIPANT SPORT AMONG
MINNEAPOLIS MEN AND WOMEN

References to Matrices for Participant Sport	Socio-Economic Strata			Totals
	Upper	Middle	Lower	
Mentions family	21	24	12	57
Mentions other social re- lations than family	11	16	16	43
Does not engage in partici- pant sport*	3	11	9	23
No response*	1	2	1	4
Totals	36	53	38	127

$$X^2 = 6.22$$

$$p < .05$$

* These rows not included in the computation of Chi-Square.

where men and women live in different worlds anyway. Sport is more of a family affair in the upper stratum.

Before concluding this cursory presentation of preliminary research findings, I would like to note one more characteristic of spectatorship. All informants were asked to choose one favorite spectator sport. The choices were then classified according to whether the sport was performed by professional or paid athletes or so-called amateur athletes in the colleges and in high schools. Table 9 shows that the audience of professional sports is drawn primarily from the lower-stratum of the Minneapolis community. However, the audience is, by no means, exclusively working class. Almost half of the middle-class informants (more than half of the middle-class women) and almost a fourth of the wealthiest informants admit that professional sports are their favorite sports. In this regard, I would like to reiterate the hypothesis that, as the professionalization of sport continues, socio-economic differences in the audience will disappear. The hypothesis needs restatement in this place for several reasons, but one reason is paramount. Table 10 shows that the relationship between education and the choice of professional sport as a favorite spectator sport is even greater than the relationship with socio-economic strata. As the colleges and universities assume greater and greater importance for supplying professional athletes, loyalties to players formed in college may be carried over to the professional arenas.

Summary and Conclusions

In this paper, I have suggested the following points. First, sport is meaningful and basically symbolic. Consequently, its analysis must take into account the sport audience. Second, the sport audience on a mass scale has only recently emerged on the American scene, signalling fundamental changes in the larger social organization. Third, the implications of spectatorship are not necessarily negative. The spectatorship of sport is necessary food for conversation and provides mutual accessibility to anonymous members of the mass society. Moreover,

TABLE 9

SOCIO-ECONOMIC DIFFERENCES IN THE SELECTION OF PROFESSIONAL OR NON-PROFESSIONAL SPORTS AS FAVORITE SPECTATOR SPORTS BY MINNEAPOLIS MEN AND WOMEN

Favorite Spectator Sport	Socio-Economic Strata			Totals
	Upper	Middle	Lower	
Professional sport	8	22	19	49
Non-professional sport	27	24	15	66
Indeterminate*	1	7	4	12
Totals	36	53	38	127

$$X^2 = 8.10$$

$$p < .02$$

* This row not included in the computation of Chi-Square.

it may bring men together at work and friends together in the home. Yet, in the family it may set up tensions in the middle class, set men and women further apart in the working class, or consolidate the households of the wealthy. Fourth, the adolescent development of team loyalties among men is a lasting affair that may have positive consequences for their continued conception of self, while the adult development of team loyalties among women (implicitly) may not have the effect of furthering an autonomous image of self. Fifth, the effects of participation in sport seem to be much the same as spectator conversation. Participation consolidates the households of the wealthy, imposes tensions in the households of the middle class, and divides the already divided households of the working class. Let me make explicit here and now that I do not regard the effect of sport spectatorship and participation on the working class family to be negative. I think of the differentiation of the husband and wife in the lower stratum as making for the autonomy of both. Sixth, I have suggested that contemporary students of sport are troubled by spectatorship because they are more often exposed to it by virtue of their middle-class origins.

TABLE 10

EDUCATIONAL DIFFERENCES IN THE SELECTION OF PROFESSIONAL OR NON-PROFESSIONAL SPORTS AS FAVORITE SPECTATOR SPORTS BY MINNEAPOLIS MEN AND WOMEN

Favorite Spectator Sport	Educational Status				Totals
	Less than HS Graduate	HS Graduate	Some College	College Graduate	
Professional Sport	18	16	6	9	49
Non-Professional Sport	10	14	20	22	66
Indeterminate*	3	4	4	1	12
Totals	31	34	30	32	127

$\chi^2 = 13.36$ $p < .01$

* This row not included in the computation of Chi-Square.

Let me conclude on that last note. Certainly, we sense a loss of dignity and value in many sports, since the game is contrived with the audience in mind rather than the play. The university with the under-sized stadium is snubbed in the scheduling; the coach who fails to win games for the vociferous segments of the demanding audience is (regretfully) terminated. In an earlier article, I had placed most of the responsibility for this state of affairs on the phenomenon of spectatorship, observing that:

With the massification of sport spectators begin to outnumber participants in overwhelming proportions, and the spectator, as the name implies, encourages the spectacular — the display. In this regard the spectator may be regarded as an agent of destruction as far as the dignity of sport is concerned. There is a tension between the morality of the game and the amorality of the spectator (immoral in its consequences).^{25/}

However, spectators are hardly discouraged from attending or viewing the game. I have shown, too, that spectatorship may have important consequences for promoting the solidarity of the larger society and its instituted relations, such as the work relation, the family, and other regularized intimacies. In addition, spectatorship may not be as pervasive as it seemed to one who is a spectator. Finally, the consequences of spectatorship may not be grossly different from the consequences of

^{25/} Gregory P. Stone, *op. cit.*, p. 99.

participation. It seems quite clear that what troubles us about the contemporary state of American sport is its promotion, not its attendance or popularity. In this respect, let me suggest that the trouble with "professional" sports is that they are not "professional." The professional stature of any occupation implies an ethic, as well as extensive education. Perhaps if we can come to define the training of the athlete as the training of a professional person in fact as well as in name, we will have moved a long way toward the solution of what troubles us. Note well that the accomplishment of such a redefinition would involve imbuing the promoters of college sport with academic responsibility as well as the responsibility for winning games and packing stadia and field-houses. If undertakers can become "mortuary scientists" (as they, in fact, have), why can't athletic directors become deans of professional schools?

REPORT OF THE COMMITTEE ON FUNCTION AND STRUCTURE

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PART I

INTRODUCTION

The Committee on Function and Structure was established as a President's Committee in February, 1955 by President Staley for the specific purpose of studying Association objectives, functions, structure, and pattern of annual meetings. It was charged with making any recommendations growing out of its deliberations which might improve the functions of the Association as related to its stated objectives. In its report at the December, 1955 meetings, the Committee, realizing the magnitude of its task, requested an additional year to complete its work. The membership granted this request and the Committee functioned this past year as a Continuing Committee.

This report of the Function and Structure Committee represents two years of intensive work. The Committee has carefully studied the objectives, functions, structure, and pattern of annual meetings of this Association. The results of its efforts are offered to you this morning. At this point it might be stated that the work has been largely that of clarification, refinement, and re-alignment; that this report contains no proposals which might be regarded as departure from original and primary Association purposes.

The Committee feels it has clarified and stated Association objectives and functions in a manner which clearly indicates our purposes and responsibilities in connection with the conduct of physical education in institutions of higher education. The Committee has also carefully studied the structure of this organization because of the inevitable relationship between structure and function. The recent valuable work of the Constitution Committee has been preserved, and practically all structural changes being recommended are possible within existing authority and provisions of the revised Constitution and By-Laws.

The traditional and basic functions of the Association as a service organization, have been safeguarded. Changing times, however, have created needs for additional and expanded services. These needs and services have been considered in the statements of objectives and functions, and also in the recommended revisions of the structural organization. In the last decade this Association has grown. It also faces new responsibilities with respect to services and leadership. It must be prepared to function effectively toward goals clearly stated and through a structure appropriate for its diversified tasks.

The report is now presented for your consideration.

PART II

THE OBJECTIVES OF THE COLLEGE PHYSICAL EDUCATION ASSOCIATION

A. CRITERION GOVERNING THE ESTABLISHMENT OF OBJECTIVES FOR THE COLLEGE PHYSICAL EDUCATION ASSOCIATION

1. Each objective of the College Physical Education Association must be applicable to each section of the organization. This implies that any activity undertaken in the name of the Association is compatible with its basic purposes.

B. RECOMMENDATIONS REGARDING USE OF ORGANIZATION OBJECTIVES

1. Each Section Code and Committee Code should consider the contributions to the general objectives by listing specific, immediate, activity objectives that will further the achievement of the Association objectives.

2. The Association objectives should be before each section chairman. They should also be at the top of each section's Operating Code. Such use will aid in keeping the Association objectives consistent with purposes and work of sections, committees, and other work of the Association.

C. OBJECTIVES OF THE COLLEGE PHYSICAL EDUCATION ASSOCIATION

1. To improve the contributions of physical education and, where appropriate, the related fields of health education and recreation to higher education.

2. To identify and define the major issues and problems confronting

the profession, particularly those of higher education, and resolve them to the best possible ends.

3. To gather, analyze, interpret and organize the research needed to resolve the major issues and/or problems facing the profession of physical education, especially those which are concerned with higher education.

4. To develop interdisciplinary relationships with kindred fields of knowledge for the light they may shed on the nature and values of physical education, (e. g., anthropology, psychology, sociology, physiology, sports medicine, etc.).

5. To improve public relations through increasing public understanding of the nature and purposes of physical education in American and world life.

PART III

FUNCTIONS OF THE COLLEGE PHYSICAL EDUCATION ASSOCIATION

Obviously the functions of the Association must represent the efforts to achieve its stated objectives. In this section of the report operational procedures, as well as goals, are indicated insofar as possible. The functions of the Association are stated as follows:

1. Utilizing Association resources in furthering the work of its members as they provide services in the following primary areas of college physical education:
 - a) Basic Instruction (Service Curriculum)
 - b) Teacher Education (Graduate and Undergraduate)
 - c) Intramural Sports
 - d) Intercollegiate Athletics
2. Defining and dealing with major issues and problems confronting the physical education profession, especially those in higher education, and exhibiting the necessary constructive leadership in working toward their solution.
3. Gathering, analyzing, interpreting, and organizing research needed to resolve major issues and problems, and advance knowledge. In this connection the Association may utilize the work of individuals and other groups, cooperate with other organizations, or on occasion engage in specific research through the activity of its sections or committees.
4. Conducting a program of public relations designed to increase understanding of the nature and purposes of physical education in American and world life. The program of public relations will be

directed to college students, college faculties and administrators, related educational and professional associations, and the lay public.

5. Developing and maintaining interdisciplinary relationships with kindred scientific and educational fields through exchange of speakers, utilization of research findings and other resources. Valuable technical assistance and supplementary data may thus be secured, thereby contributing to the effectiveness of the Association.
6. Conducting annual meetings of the Association designed to deal with professional matters of major concern to the membership as related to their understanding, functions, and responsibilities in institutions of higher education. Other primary purposes of the annual meetings will be to conduct the business of the Association; exchange ideas on a first-hand basis; and enjoy the fellowship of colleagues.
7. Designing the structure of the Association so that through its officers, council, sections, committees, and general membership, it may operate most effectively in terms of its objectives.
8. Publishing the PROCEEDINGS of the annual meetings and effecting distribution in accordance with the provisions of the Constitution and By-Laws.
9. Maintaining effective liaison with related professional groups through joint committees whose common interests and common problems require coordinate efforts.

PART IV

THE STRUCTURE OF THE COLLEGE PHYSICAL EDUCATION ASSOCIATION

After a careful study of our structure it is felt that greater operational soundness, stability and continuity of action would be achieved if certain changes were made. Each committee and Association function was critically examined before it was permitted a place in the recommended structural revision.

Throughout this study an effort was made to preserve one of our basic tenets — that of broad participation by the membership in the affairs of the Association. A description and explanation of the suggested structural revision follows.

CHART I

This chart (Appendix A) shows a plan of Association organization whereby sections are established in the five areas of major concern to this Association. These are: basic instruction (service curriculum); teacher education; intramural sports; research; and intercollegiate sports. Each of these sections may deal broadly, as well as deeply, with the plans, services, problems, and other matters appropriate to these areas. The chart shows some of the suggested potential functions of each section.

These sections may be established as presently authorized in the Association's Constitution and By-Laws (Constitution - Article V; By-Laws - Article V, Section 1-4). The present Constitution and By-Laws, however, do not specify the manner of electing, or the duties of section officers. Appended to this report (Appendix B) is a proposed expanded Article V of the By-Laws covering these matters.

Chart I also shows an expanded Executive Council consisting of ten (10) members. These are the five members currently authorized (President, President-Elect, Secretary-Treasurer, Immediate Past President, and Member-at-Large), and the five elected section chairmen. It was felt that a larger Executive Council would be more truly representative of the interests of the membership. It would also make possible coordinated planning in each of the major areas of Association activity. The five section chairmen, the convention manager, and the President-Elect should constitute the Convention Program Committee, responsible to the President.

CHART II

This chart (Appendix C) shows the present committee structure of twenty-nine (29) committees. These are: four (4) President's Committees; four (4) Continuing Committees; fourteen (14) Standing Committees and seven (7) Joint Committees. These are discussed a little later in this report.

CHART III

Twenty (20) committees are recommended in CHART III (Appendix D) as adequate for Association purposes. The primary difference between the present and recommended committee structure is that committees formerly predominantly concerned with programs (Curriculum, teacher education, intramural sports) are omitted in the latter. It is believed that the treatment of the working program areas of the Association will be characterized by greater depth, breadth and stability when dealt with through sections. Furthermore, these areas of vital concern will receive full consideration on the Association executive level, through the presence of section chairmen on the Executive

Council. Thus, better coordination is obtained throughout the entire Association, built upon better communication.

The remaining committees are primarily concerned with Association business such as: codes, constitution, finance, and cooperative relationships with other organizations.

Discussion of Recommended Changes in Committee Structure

1. President's Committees

- a) Basic Research Committee: Permit to expire in 1956, and reconstitute as a Section in accordance with the provisions of Article V, Section 2 (Sections) of the By-Laws.

Reason: The research function has become a matter of great significance to the Association with research matters best dealt with as a section rather than as a President's Committee.

- b) Convention Program Committee: Permit to expire in 1956, and reconstitute as a Standing Committee in accordance with provisions of Article VIII, Section 4 (Committees) of the By-Laws. The membership of this Committee should consist of the Section Chairmen, Convention manager, and the President-Elect as Chairman.

Reason: This is a permanent function with personnel responsible for planning convention programs designated by the Association Constitution and By-Laws. Reference: By-Laws, Article III, Section 3.

Article VIII, Section 3, should be rewritten to provide for an expanded Convention Program Committee.

2. Continuing Committees

- a) Policies Committee: Discharge in accordance with provisions of Article VIII, Section 3 (Committees) of the By-Laws. Reconstitute as a Standing Committee in accordance with provisions of Article VIII, Section 4 (Committees) of the By-Laws.

Reason: The Policies Committee provides an important means whereby the membership achieves a voice in policy matters affecting the operation of the Association.

- b) Public Relations Committee: Discharge in accordance with provisions of Article VIII, Section 3 (Committees) of the By-Laws. Reconstitute as a Standing Committee in accordance with provisions of Article VIII, Section 4 (Committees) of the By-Laws.

Reason: There is need for considerable effort on the part of the Association to improve public and institutional understanding of physical education. This committee can serve an important liaison and interpretation function.

- c) Function and Structure Committee: Discharge in accordance with provisions in Article VIII, Section 3 (Committees) of the By-Laws.

Reason: If all goes well, this committee will have served the purpose for which it was created.

3. Standing Committees

- a) Construction and Equipment Committee: Discharge in accordance with provisions of Article XII, Section 1 (Amendments) of the By-Laws.

NOTE: The dissolution of Standing Committees is not covered in Article VIII, Section 4 of the By-Laws, therefore, appropriate action must be taken as permitted in Article XII.

Reconstitute as a Continuing Committee in accordance with the provisions of Article XII, Section 1 (Amendments) of the By-Laws, when needed.

Reason: This committee is not active every year in a basic role. It is believed the functions represented by the Construction and Equipment Committee can be best performed as a Continuing Committee. It could then deal with problems and needs as they arise.

- b) Curriculum Research Committee: Discharge in accordance with the provisions of Article XII, Section 1 (Amendments) of the By-Laws.

Reason: The functions formerly performed by the Curriculum Research Committee will be absorbed in the newly established sections of Basic Instruction; Teacher Education; and Research. This recommended change removes a committee which will make possible avoiding over-lapping and duplication of Association functions.

- c) Intramural Sports Committee: Discharge in accordance with provisions of Article XII, Section 1 (Amendments) of the By-Laws.

Reason: This committee is already functioning as a section and will be one of the newly constituted sections of the Association where the interests of intramural personnel may be provided for more adequately.

- d) Problems Committee: Discharge in accordance with provisions in Article XII, Section 1 (Amendments) of the By-Laws.

Reason: Discussion with former members of the committee, and an analysis of its functions reveal that all of its work can adequately be covered in the new sections entitled — Basic Instruction; Teacher Education; and Research. This is another area where over-lapping and duplicating functions can be removed. In the past this committee has reported on research; has dealt with teacher education problems; and also basic instructional (Service curriculum) problems.

In the event that specific problems arise needing special treatment, the President can reconstitute this committee as a President's Committee.

- e) Required Service Program Committee: Discharge in accordance with the provisions of Article XII, Section 1 (Amendments) of the By-Laws.

Reason: The work of this committee will be absorbed in the recommended Basic Instruction Section. In reality, there is no change in function here. The interest of Association members in the Required Service Program area will be cared for in a section rather than through committee action.

- f) Teacher Education Committee: Discharge in accordance with Article XII, Section 1 (Amendments) of the By-Laws.

Reason: The work of this committee will be absorbed in the recommended Teacher Education Section. In reality, there is no change in function here. The interest of Association members in the Teacher Education area will be cared for in a section rather than through committee action. This will permit more stability and continuity in dealing with matters of primary concern to Association members.

4. Joint Committees

- a) Implementation Committee on Washington Physical Education Conference: Discharge by action of the Executive Council by whose action it was created (By-Laws, Article VIII, Section 5 - Joint Committees).

Reason: The By-Laws, reference as above, state... "A Joint Committee. . .deals with a specific project or problem in cooperative relationship with one or more other

associations or organizations." The Conference is not an organization, and compliance with the By-Laws, therefore, is not accomplished. Implementation of the findings of this Conference would logically be a function of the proposed Basic Instruction Section.

- b) Implementation Committee, Intramural Sports: Discharge by action of the Executive Council by whose action it was created (By-Laws, Article VIII, Section 5).

Reason: Same as given for discharge of Washington Physical Education Conference Committee. Implementation of the findings of the Intramural Conference would logically be a function of the Intramural Section.

PART V

THE ANNUAL MEETINGS OF THE COLLEGE PHYSICAL EDUCATION ASSOCIATION

The following statements and recommendations concerning the annual meetings of the Association are based on the replies of the membership to a questionnaire, and the deliberations of the Function and Structure Committee regarding these meetings.

1. Association meetings should be moved around the country on a carefully considered plan of regional rotation. This would insure members in each of the regions of having the meetings in their area with reasonable frequency over a period of years.

2. Association meetings should be held on an annual basis as at present. Although there is not complete accord regarding the time of holding the meetings, the membership vote heavily favored retaining the present plan of Winter meetings. Two to three-day meetings are preferred.

3. The present pattern and balance of General Session and section-type meetings is good. There should be at least two section-type meetings conducted simultaneously during times allocated for such meetings. More than two, as a regular meeting pattern, would probably result in the groups being too small. Occasionally, however, as need arises, it may be necessary to plan three section meetings for the same time period.

4. The programs at General Sessions should deal largely with scholarly papers of a scientific and philosophical nature. Outstanding research reports and discussions of major issues confronting the Association and the profession would also be suitable for General Session program consideration.

5. Section meetings will probably be devoted largely to such areas of primary concern as: the basic instruction program; intramural sports;

teacher education; research; and intercollegiate athletics. Each of these sections could have two meetings during the Convention. On certain occasions two or more of the sections might plan a joint meeting. For example, important research in the teacher education area might be reported at a combined meeting of the teacher education and research sections.

6. The membership felt very strongly that some plan needs to be developed to insure meetings of highest quality and greatest interest. A larger Convention Program Committee, as recommended in PART IV of this report, would provide a broader base for such planning. Section leaders might well devote part of each meeting to obtaining oral or written suggestions for future programs.

7. The Banquet, considered a General Session, should be a warm and gracious affair. On these occasions, addresses of a scholarly nature would be desirable, but, perhaps, in a lighter vein than at other General Sessions.

8. Business meetings should be as brief as necessary transactions will permit. Brevity, without sacrificing clarity or completeness, should characterize each report. Elections should be conducted efficiently but with dispatch. Committee reports should be largely confined to those dealing with the business affairs of the Association. Special committee reports, requiring Association action, may be given at the Business meeting as occasion requires. The Executive Council might well give some thought to having certain committees give their reports at the section meetings concerned with the area of committee activity. All committee reports should be published in the PROCEEDINGS.

9. In the questionnaire submitted to the membership, a large majority felt that the reports of meetings as presently published in the PROCEEDINGS are satisfactory. In a related question, however, a majority, almost equal in size, believed that reports should be carefully screened by an Editorial Board or Committee so that only significant reports, papers and research are published. How to accomplish the desired screening without causing incomplete reporting and undesirable delay in publication is a problem for which this Committee did not find a ready solution. Perhaps this matter can be studied further by a President's Committee with a report given at the 1957 meetings.

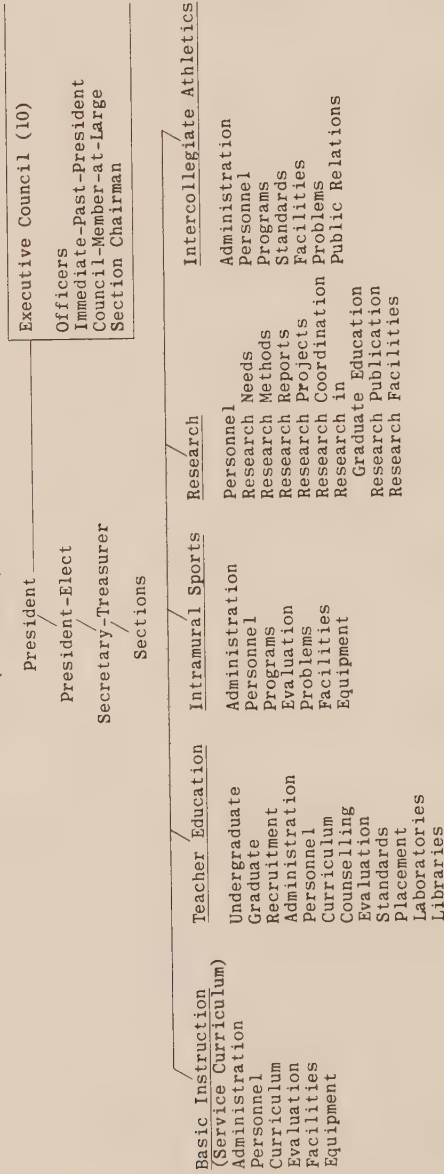
10. Membership in this Association ranges from nationally prominent administrators and educators with many years of experience, to young teachers and coaches just beginning their careers. This Committee feels that those responsible for planning future Association meetings should provide for a greater professional and social interchange between members. Two suggestions relevant to this interchange are the planning of "consultant sessions" and some extra planning in connection with the Social Hour preceding the Banquet. In the "consultant sessions", persons, times and places may be designated so younger members may seek out those with whom they wish to consult or merely visit. At the Social Hour, the Hospitality Committee, readily identifiable as such, could arrange for as many personal greetings and introductions as possible or desired.

11. Broad participation by the membership in the committee work and convention programs of the Association is greatly desired. The appointment of committees and the arrangement of convention programs should be guided by this policy.

APPENDIX A

CHART I

PROPOSED
COLLEGE PHYSICAL EDUCATION ASSOCIATION
PLAN OF ORGANIZATION
(Structure)



APPENDIX B

RECOMMENDED NEW ARTICLE V FOR BY-LAWSBY-LAWS - ARTICLE V - SECTIONS

Section 1 - The ASSOCIATION may establish sections within its organizational structure to promote the activities of professional-interest groups. Examples are: basic instructional program; intramural athletics; teacher education; intercollegiate athletics; and others.

Section 2 - The membership may authorize the establishment of any given section at a regular business meeting by majority vote, upon written application by twenty-five (25) current members stating the purpose and function of the proposed section, and upon recommendation by the Executive Council - provided a quorum takes action as prescribed in Article VII.

Section 3 - Each section shall elect its own officers consisting of Chairman, Chairman-Elect, and Secretary, at the annual section meeting. A Nominating Committee consisting of three (3) section members shall be appointed by the Chairman, at least three months preceding the annual section meeting at which the section officers will be elected. The Nominating Committee shall prepare a slate of two (2) names for each office. Additional nominations may be made from the floor. A majority vote shall be required for election. If there are more than two (2) candidates and no candidate receives a majority on the first ballot the two candidates receiving the highest number of votes shall then be voted upon. Elections shall be by secret ballot.

Section 4 - Section officers shall be elected for one year, extending from the close of the meeting at which they were elected to the close of the next annual meeting at which their successors are elected. Section officers shall not immediately succeed themselves in the same office.

Section 5 - The Chairman shall preside at all section meetings which shall be open to the entire ASSOCIATION membership. He shall supervise the program planning for all section meetings held during the annual meetings of the ASSOCIATION. He shall also be responsible for pursuing professional activities throughout the year which are pertinent to the interests of the section. He shall be responsible for the conduct of section activities in a manner consistent with the intent and stated provisions of the ASSOCIATION'S Constitution and By-Laws. By virtue of his office as section Chairman, he shall serve as a member of the Executive Council of the Association.

Section 6 - The Chairman-Elect shall, during the absence of the Chairman, perform all the duties of the Chairman and if the office of

Chairman becomes vacant, the Chairman-Elect shall succeed to the Chairmanship for the unexpired term. The Chairman-Elect shall succeed to the Chairmanship at the normal expiration of the Chairman's term of office. The Chairman-Elect shall plan the section program for its regular annual meetings, under the supervision of the Chairman as stipulated in Section 5 above.

Section 7 - The Secretary shall keep minutes of all business transactions at section meetings. These minutes shall be passed along to each succeeding Secretary in order that the continuity of section activity may be maintained. He shall be responsible for forwarding all papers and reports given at section meetings to the Secretary-Treasurer of the ASSOCIATION for consideration for publication in the PROCEEDINGS.

Section 8 - The ASSOCIATION may abolish a given section at a regular business meeting by a two-thirds (2/3) majority vote, provided a quorum takes action as prescribed in Article VII.

APPENDIX C CHART II

5. Present Committee Structure

President's	Continuing	Standing	Joint
*1. Basic Research	1. Operating Codes	1. Constitution	1. American Council on Education
2. Convention Publicity	*2. Policies (S)	*2. Construction and Equipment	2. College Committee on Physical Education-Athletics
3. Convention Hospitality	*3. Public Relations (S)	*3. Curriculum Research	
*4. Convention Program (S)	*4. Function and Structure	4. Finance	3. National Committee for Improvement of Professional Preparation in Health, Physical Education and Recreation
		5. Foreign Relations	
		6. Historical Records	
		*7. Intramural Sports	4. Representative Assembly of the American Association for Health, Physical Education and Recreation
		8. Membership	
		9. Necrology	5. Implementation Committee Intramural Sports
		10. Nominations	
		*11. Problems	6. National Association for Physical Education for College Women on Co-Educational Problems
		*12. Required Service	
		13. Resolutions	7. Implementation Committee on Washington Physical Education Conference
		*14. Teacher Education	

APPENDIX D CHART III

6. Recommended Committee Structure

President's	Continuing	Standing	Joint
1. Convention Publicity	1. Operating Codes	1. Constitution	1. American Council on Education
2. Convention Hospitality	2. Construction and Equipment	2. Finance	2. College Committee on Physical Education and Athletics
		3. Foreign Relations	3. National Committee for Improvement of Professional Preparation in Health, Physical Education and Recreation
		4. Historical Records	
		5. Membership	4. Representative Assembly of the American Association for Health, Physical Education and Recreation
		6. Necrology	
		7. Nominations	
		8. Resolutions	
		9. Convention Program	
		10. Policies	5. National Association for Physical Education for College Women on Co-Educational Problems
		11. Public Relations	

ADAPTED PHYSICAL EDUCATION AT THE SECONDARY AND UNIVERSITY LEVEL

Thomas M. Scott
University of Florida

The title of my topic was chosen as a general one especially to allow a great deal of latitude in my remarks that follow. I think this is rather a widespread practice so I do not feel original or guilty.

The area of Adapted Physical Education is a relatively new one and so I feel a little like one who must interpret what he does professionally to his associates, his friends, and even his own family.

Inasmuch as the area of Adapted Physical Education now has a name, some of the more enthusiastic workers have attempted to enforce a separation from the regular program on the college level and make an entity of this area. I differ with this approach and maintain that the physically limited student should and must be provided for within the structure of the total Physical Education program. To separate them is, I believe, both economically and educationally unsound.

In his text, Dr. Daniels describes Adapted Physical Education in terms of aims, objectives, and underlying principles. I think another way of describing the area might be "An Excellent Physical Education Program." For if a school has an excellent Physical Education program, it must afford EVERY student the opportunity of participating in that program.

Now I admit that there is a great gap between the offerings of the secondary schools and those of most colleges. However, it seems a paradox that in such matters as body mechanics training, muscular coordination, weight control, and rehabilitation, very often the person gets to the university level before any real effective evaluation and service is given, and by that time it is neither practical nor beneficial.

Also, the scope of the physical education program must be broad enough to include activities of extreme range in exercise tolerance levels. To attempt to satisfy the physical needs of children with a team sport program is indeed an impossibility.

One of the comments which I have heard professional people make is that in their school there are not enough children with limitations to warrant a "Special Program." In any school where there are more than seven children this statement is not consistent with the available statistics. My reply to this statement is often in the form of this question: "And how many times are the children in your school screened to determine the status of their health and their ability to participate in a full and strenuous physical activity program." The answer to this question is routinely the same.

Now, insofar as the secondary schools are concerned, the most

imposing problems lie in the areas of scheduling, adequate pupil-teacher ratios, and administrative support for the total program.

There seems to be some empirical evidence to justify solving the scheduling problem by offering activities in which the limited pupil could participate on an equal basis with non-limited pupils. This certainly is not an easy solution, but is one which depends greatly upon the general philosophy of the school and specifically upon the person who conducts the activity program.

Of course it becomes obvious that this is also a problem related to the construction of the general curriculum. An example of a concerted effort in solving the manifold problems encountered in this area is the 200-page bulletin published by the Board of Education of the City of New York, in which they deal in part with the physical activity and recreational needs of the limited child.

One of the recurring statements made by in-service teachers about this area relates to the gross maladjustment in the pupil-teacher ratio, and the resulting effects on their teaching. Again I say we must look to the education administration for help and understanding in considering the total physical education program in order that the adapted phase may get a breath of life. We cannot expect any teacher to do a good job with a class which is doubled, tripled, and sometimes even quadrupled in size. The instructor who tries to carry 70, 80 or more students in a physical activity cannot hope to do an adequate job with the few who have poor vision, who are grossly overweight, whose neuromuscular potential is extremely low, etc., etc. And the problem becomes more acute as the schools become more crowded, and the classes continue to increase in size (Example: Friend in large Eastern city who lost job in one school because the playgrounds are now filled with temporary classrooms).

In my opinion, there is some misconception concerning the qualifications of persons who deal with physically limited children. I think that the problem is not one of professionally unprepared physical education teachers, which is the reason some persons put forth for a lack of such type program, but rather a lack of confidence in them by administrators, and by themselves in their own ability to do a good job.

I think that any mature, interested person with a good background in Physical Education can gradually develop such a program in the secondary school, if he is permitted to do so.

Some support now comes from the State Department of Education in the State of Florida. The area of Special Education now provides for consultants who offer diagnostic and evaluative services, and act as liaison personnel between the school and the various agencies involved. In some cases, this relates directly to the child and his potential in the Physical Education program.

If time permits, a description of the Adapted Physical Education Program and the University of Florida with most emphasis on scope and related areas rather than full program content.

THE TEAMWORK CONCEPT IN THE ADAPTED PHYSICAL EDUCATION PROGRAM

If the nature and scope of a physical education situation permits, a program of individually supervised sports, exercises and recreational activities for physically limited students may be organized. The director of such a program has a good opportunity to be of service to his students through teamwork with many persons and agencies both on and off the campus.

WORKING WITH INSTRUCTORS

The teamwork concept begins with a close alliance between the director of the adapted program and the individual instructors in the sports program. If physically limited students are to participate in regular activity classes, their instructors must have a good understanding of the basis upon which those students are assigned to classes. If the necessary medical information is available to the instructors for recording in their roll books, it is even possible to frame a program of activity for the severely handicapped. This pertains, of course, most especially to programs which are characterized by a wide scope and variety of activities.

If the director is familiar with the total program, the methods and techniques of each instructor, and the problems of the physically limited students in activity classes, he is able to make necessary adjustments between the students and their instructors. This does not imply in any way that the student's program should be based on special concessions, lowered skill or knowledge requirements, or any other consideration not normally shown to other students. It does mean that the director should be able to supply the instructors with necessary medical information concerning the student, and should handle administrative problems arising from absences from class for physical reasons, or changing activities in mid-term, to assure continuity of the student's program.

AFFILIATION WITH MEDICAL STAFF

Since a program of this type can function properly only with adequate evaluation and information from a medical source, affiliation with the Student Health Service is of primary importance. A close personal contact, established with the medical doctors, psychiatrists, physical therapists and others in the Student Health Service, proves invaluable in maintaining good working relations and contributes to a mutual understanding of policies and procedures as they apply to the needs of the physically limited student.

In a situation where students in physical education are classified by the Student Health Service physicians for participation in activities, it is essential that those involved understand all the phases and requirements of the program, the sports skills needed, the physical fitness standards, and the various levels of activity at which the student may participate. It is also valuable to include the Student Health Service staff in appropriate

seminars, staff meetings, and committee functions of the physical education department.

TEAMWORK WITH ADMINISTRATIVE HEADS

It is most important for the program director to adhere rather closely to departmental policies and the general philosophy of the physical education program in which he works. In order to present the greatest opportunity to the physically limited student, emphasis should be placed on the common experiences he shares with the student of unlimited physical capacity. Wherever and whenever possible, the general departmental requirements should apply to all students. Within that framework the director of the adapted program should handle the individual sports and exercise programs of his students according to their needs and desires.

Obviously, the program of small scope is limited in this respect because the variety of sports and recreational activities which the student needs or is able to participate in might not be offered. Anyone working with physically limited students must constantly strive to broaden the offerings of the program in which he works. This means that the program with a greater variety in levels of activity will go much further toward accomplishing its objectives than a program which offers only a small selection of activities.

ASSOCIATION WITH STUDENT PERSONNEL STAFF

On a campus where Student Personnel services are extended to students it is most advantageous for the adapted sports program director to become associated with that group. Thus it is possible to obtain first-hand, accurate information concerning the organization and administration of units such as housing, student union, clinical services, Dean of Men's and Dean of Women's office, and higher administrative offices with which he might have to deal.

Association with persons whose primary responsibilities include guidance and counseling of students makes possible some teamwork which helps the program director immeasurably in solving with his students problems in areas not clearly defined as health or physical education. An ideal situation is one in which the Student Personnel Staff gathers regularly for discussing programs, visiting, and observing demonstrations in the various units, and talking over common problems.

AFFILIATION WITH CLINICAL SERVICES

Many times students who are limited in their physical education activities can benefit from certain types of clinical services. These might include a speech and hearing clinic, a reading laboratory and clinic, a psychological clinic, a marriage and family clinic, a psychiatric clinic, a physical therapy clinic, and an adapted sports and corrective exercise clinic. An excellent opportunity is afforded the program director to aid his students if he can be affiliated with a clinical services program. The possibility of referrals from the program director to units such as these

is evident. He is perhaps one of the best placed persons to observe and detect symptoms of deviations which might be helped by one or more of these services.

COOPERATION WITH OFF-CAMPUS AGENCIES

Another important function of the director is to coordinate and integrate the needs of his students with the services of the many off-campus agencies which might be extended to them. In some states, for example, working closely with the representative of the State Vocational Rehabilitation office may mean vocational, medical, and financial help for students in order that they may continue their academic pursuits. The program director may also find answers to some of his problems in such agencies as state councils for the blind, local affiliates of the national societies for crippled children, crippled children's commissions, and many others.

Obviously the concept of teamwork is not unique in this particular area. It is an important factor in administering any program of services to an individual or a group. In order to benefit the student to the utmost, however, it must be an essential characteristic of the physical education program designed to meet the needs of the physically limited student. The director of such a program must be allowed flexibility in dealing with his students and must have a desire to aid them beyond the defined limits of health and physical education.

A LOOK INTO THE LIVES OF STUDENTS PARTICIPATING IN ADAPTED PHYSICAL EDUCATION

J. A. Fischer
Kent State University

The information in this report is based on approximately 100 students at Kent State University from 1952 to 1956. These students were assigned to the Adapted Physical Education section through the University Health Service because their physical condition would not permit unrestricted participation in group physical education service courses, and because of their need for an individually prescribed program of therapeutic exercises and recreational sports adapted to their needs, capacities, and interests.

The requirement in the adapted program is the same as for courses in the general service curriculum; namely, 6 quarter hours of credit with a grade of "D" or better. Because of the nature of individual needs and the unusual opportunity for meeting them, a number of students continue in the program beyond the normal requirement without curricular credit.

The students meet 5 days per week for 3 quarter hours credit. Mondays and Wednesdays the program consists of special conditioning exercises and recreational sports. Tuesdays and Thursdays are used for swimming therapy, which includes standard aquatic activities adapted to the adjustment and recreational needs of the participant. Fridays are utilized for sports appreciation which primarily deals with films, film strips, and demonstrations of various sports.

They are also required to write a term paper at the beginning of the quarter and at the end of the quarter. The purpose is primarily to aid the student in becoming well informed regarding his condition and in living most effectively within the limits of his disability. In addition, the evaluation helps us to better understand the handicapped individual.

The first paper includes a brief autobiography, a discussion of the causes and effects of his present condition, the possible adjustments that it will be necessary for him to make, his life ambition, objectives he hopes to attain, and what he expects from this program.

The paper at the end of the quarter consists of an evaluation of the course by each student, his achievements, skills that he has learned, possible change of outlook, and other accomplishments while participating in the adapted physical education section.

Individual conferences are held with each student, some scheduled and others spontaneous.

The term papers, conferences, results of the medical examination, present medical care, recommendations of the physician, and ac-

complishments in the course make up the case history of each student. Using these case histories as a basis, we are able to get a closer look into the personality of the atypical and to secure his reaction to the program.

It is understood that students are motivated by various stimuli while submitting information, and all the material gained in this manner may not be completely accurate. However, it is considered sufficiently correct to make a few general observations.

The ambitions and desires of the handicapped are not different from those of the normal individual. He wants to be a contributing member of society and gain recognition for his accomplishments - socially, economically, and physically. He desires an understanding of his abilities, not sympathy for his disabilities.

Most of the students are very grateful to have an opportunity to participate in sports activities. They have been denied this chance in nearly every instance in high school.

The fun and enjoyment of competition, learning new recreational skills, participating in a group and achieving group recognition, being able to fulfill requirements of daily living which they had not been able to do previously - all these are items that have been expressed by these students in conferences and term papers. In many instances, students notice increase in appetite, increase in weight, and generally feel refreshed and energetic.

Some of the conditions that have caused students to be assigned to this type of program at Kent State University are as follows: chronic arthritis of the spinal column with marked scoliosis; muscular dystrophy; cerebral palsy-spastic; heart murmur indicating cardiac insufficiency due to rheumatic fever; ankylosed joint, restricted movement in joint; recurrent chronic dislocation of the hip; blindness; post-poliomyelitis; recurrent severe and chronic asthma; high blood pressure; partial paralysis due to brain injury; severe burns, both legs and feet; chronic peri-arthritis and arthritis due to dislocation of shoulder; sacro-iliac sprain; congenital malformation of arms; neck fracture; diabetes mellitus; low blood pressure and low metabolism.

At this point it might be desirable to cite, in part, a few specific cases:

Case No. 1 -

Description of the condition: congenital dislocation of both hips complicated by a club foot. Hip condition partially corrected via surgery. Right hip ankylosed with femur set at 45° angle.

Student evaluation:

I feel that this class is a God-send to me. My only regret is that I never had a chance to get into an adapted physical education class before.

I have always had a suppressed desire to participate in various sports, but was never given the opportunity to see if by any chance I could perform them. Always in the past I was just excused from all physical activity. Even at home I was discouraged. My parents would always say, "You can't do this or that," and so I never had a chance.

I am now able to pick small objects up from the floor. Before taking this course I could only tie my left shoe, and I could do this only by sitting on a chair and placing my foot on a rung. I can now bend at the knee and reach the shoe to tie it on the floor. I had always thought it was impossible for me to tie my right shoe - now I can do that too. To most people, tying shoes is a common-place thing, but to me it is quite an accomplishment.

I had never been in the water before I took this course. I have now learned to swim three-fourths of the width of the pool. I have only one regret: I didn't swim the complete width. I wanted to swim the complete width very much.

Learning to bowl was a terrific experience for me. Participating in sports enables me to get acquainted with more people, and not to just be an extra person standing around for people to pity, but to be one of the group. I don't intend to stop now. I want to continue bowling, playing table tennis, doing my exercises, and improving my swimming. Next summer, I want to join the Y.M.C.A.

Case No. 2 - (An accounting major - an immigrant from Russia, hospitalized in Europe).

Description of the condition: Fracture of left hip and right elbow in a sledding accident at age 13. Limitation of flexion (25%) of left hip. Left leg 3 inches shorter. Complete fixation of right elbow at 90°.

Student evaluation:

Since I broke my leg and hand I never had any physical activities, and I followed strictly what the doctors said - to keep away from any physical activities. In such a way I lived for 22 years. Frankly speaking, when I began my requirement of H.P.E. I did not expect to gain from it. But I was wrong because anything can happen in this country.

Thus far, I have learned to swim and dive from the diving board. I can play table tennis and bowl. But the thing that amazes me most is the fact that I can ride a bicycle - a thing that was absolutely impossible in the beginning of this course. The movement in my hip and especially in my left knee has been greatly improved.

To close my summary account of this course, I have to put on my debit side - 16 lbs. of my weight and a few pints of sweat. But the credit side shows balance as I mentioned above.

Case No. 3 - (An education major. He had acted in and directed a number of university plays and was a member of the debate team).

Description of condition: Chronic arthritis of spinal column with marked scoliosis and some kyphosis. General muscular weakness and loss of weight. The doctor's additional comment: "Student gained 15 lbs. during the last time he took the course. Desires to repeat it."

To fully comprehend the remarks in this last evaluation, it should be mentioned that health and physical education majors taking the theory course, Individual Physical Education, which is open to seniors and graduate students, receive laboratory credit for observing and assisting in the activities program.

Student evaluation: (Due to the exceptional ability of this student to express himself regarding this phase of his education, his evaluation is given in its entirety.)

The approach to health and physical education exemplified in Adapted Activities is to me the only sane and commendable approach that can be made in any school that has as its focal point the interest of students, all students, rather than the amassing of competitive laurels. Its administration recognizes individual limitations and infirmities with an almost casual acceptance; it is a recognition that is neither condescending nor over-demanding. All of the course's procedures follow from this fundamental attitude of acceptance and are therefore designed from an individual basis.

A more specific analysis of my reactions to the course must include only a representative selection of its various aspects. Remedial exercises chosen for their suitability to the individual problem of the student were chosen with discretion and care. These exercises were helpful to me at least to the extent of commanding my attention to posture for the extent of the quarter, and also my general physical condition was made somewhat more energetic. Swimming was the most enjoyable part of the course from my point of view in that it gave me a chance to engage in an activity which I enjoy without constant harassment from some zealot urging a proficiency beyond my capabilities. From my first experience with the course, I have maintained an enjoyment in water activities which has been a source of pleasure to me; this enjoyment, I feel, could easily have been denied me by some of the "give 'em hell" teaching procedures used by the less enlightened.

The passing acquaintance that we made with a number of sports was also worthwhile. I regret that my schedule did not enable me to continue with bowling, as I think that I might become passingly mediocre at this activity; at least, I think I might enjoy trying it. This course, by its nature and the demands of time, does not allow a very complete indoctrination into these various activities, but it at least helps one to dis-

cover recreations that might become rewarding. This quarter, I was happy to see less emphasis on table-tennis, a diversion that I find most repulsive. I wish that we might have spent more time on golf, but I think I may take golf during the summer. The few films that we had I had seen previously, but they were once again instructive in the appreciation of sports.

My one objection to the course is not in actuality a very serious complaint. That strange assortment of student instructors that followed us about were for the most part friendly and helpful, but when a class has more instructors than students, one is inclined to feel somewhat like an amoeba placed before a biology class for inspection. A few of them seemed confused as to what function they were to serve in the class, and others were not in keeping with the usual philosophy of the class and seemed compelled by some psychotic drive to spur the student on with a number of timeworn locker room slogans such as "Come on men, we can do it." "Let's show them we can make it." "That's a big man." Etc., etc. I seriously do not object to this, but some of the instructors were the comic relief needed in any serious enterprise.

Though my physical improvement is not as dramatically evident in weight statistics as it was the first time that I took Adapted Activities, I have felt better all quarter, and I think my posture has considerably improved. Backaches, about which I usually bore my friends, were far less frequent, and any physical discomfiture that I felt this quarter I gladly, and, I think, accurately ascribe to the mental agonies of student teaching rather than to the physical demands of this class in H.P.E. One good result of the course was my chance to get to know some individuals who have a far more valid claim to physical illness than I have. These young men were a source of wonder in the marvelous adaptations that they have made to their limitations. I certainly shall never regret having known them, and the social and psychological aspects of the course were made rewarding by this association.

Next year, I will go on to graduate school in speech. My particular interest is in extracurricular activities in theatre and in forensics, and I think the most valuable thing that I have learned from the course for this planned profession is: accept students for what they are and start from there. I hope that I will apply this principle equally intelligently in my own work with students.

These are just a few examples of the reactions of students to the adapted physical education program at Kent State. Much more can be done.

Physical education can make one of its greatest contributions in this area. It should provide not only for the highly skilled through varsity

sports, the average individual through service classes and intramural sports, but also for the individual who is in need of an individually prescribed program. It is generally accepted that education should be provided for all American youths. The school is not fulfilling its moral responsibilities if it does not provide a physical education program for those who are below par physically. The physical educator's background of anatomy, physiology, kinesiology, sociology, and psychology puts him in a favorable position to make a valuable and important contribution to the education of the atypical.

ATTITUDES EXPRESSED ABOUT BEHAVIOR DEMONSTRATED IN CERTAIN SPECIFIC SITUATIONS OCCURRING IN SPORTS

by
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The data used to support the generalization made here were secured from young men and women enrolled in the basic physical education classes at Louisiana State University and from a small sampling of adult males living in Baton Rouge, Louisiana.

The technique used in gathering the data was that of presenting ten specific sport situations in written form with behavior of participants described and asking whether or not the behavior as described was approved. Reasons for approving or disapproving the behavior were requested. In the form used in securing the information from the men, the statement was made in the instructions that a number of the practices described were violations of stated rules and all were considered as violations of the "spirit" of rules. It was also stated that the practices were employed with the intention of gaining an advantage. The form used in making the study with the women did not contain such a statement. The women were simply asked to read the statements carefully and to state whether or not they approved of the behavior described, giving reasons for their attitude. The situations described in the form used by the women and men were somewhat different since it was thought that they should be so because of the differences in experience in sport held by men and women.

Based upon an analysis of data secured from a random sampling of three hundred men and one hundred fourteen women enrolled in the basic physical education classes at Louisiana State University supplemented by those secured from ninety male adults of Baton Rouge, the following generalizations would appear to be justified.

(1) Booing of visiting team basketball players as they attempt to make free throws is not considered poor sportsmanship by an appreciable percent of men and women. Twenty-three percent of the college men and thirty-six percent of the college women did not consider it such. Fourteen percent of the adult men indicated that they thought the practice is not evidence of poor sportsmanship.

Typical of the statements made in defense of the practice were the following:

Acknowledgment is made of the work done by Aubrey Cole, Fred Church, and Earl Hamner, graduate students in the Department of Health & Physical Education, La. State University, in compiling the data of this study.

- a. Athletes should be able to "take" the noise and not let it upset them.
- b. It is a part of the game.
- c. Spectators yell as field goals are attempted, so what's the difference?

(2) Approximately fifty percent of the college men, about one-third of the male adults and fifteen percent of the college women approve of the practice of deliberately taking advantage of a situation in sports and putting it up to the Official to catch them doing so.

This generalization is based upon the responses made to two situations presented to the men: first, Eddie Stankey's deliberate kicking of the baseball out of the hands of Phil Rizzuto in a World Series game of a few years ago and second, the practice followed by some teams of deliberately charging ahead of the ball in football when on offense. The women were asked whether or not they approved of a situation in softball in which a pitcher deliberately used a sidearm delivery to advantage when she found that her illegal delivery was hard to detect.

Most of the reasons given in support of the practices indicated were to the effect that it is the official's business to make the decisions and that it is "smart" play to take any advantage that can be gotten due to failure of the officials to make decisions preventing such practices.

(3) Generally speaking, college men and male adults do not favor action on the part of a participant to "even up" for a decision which an official makes against his opponent that he has good reason to believe is wrong.

Two-thirds of the men disapproved of a situation where a tennis player evened up for what he thought was a mistake on the part of the official by hitting into the net on his next opportunity.

The chief reason given for the viewpoint expressed was that such decisions are a part of the game; go against you a part of the time and for you as many times.

(4) The majority of women think that a player should tell the official in a tennis match when in the player's judgment a mistake has been made in calling a shot against her opponent.

Forty-three percent of the women indicated, however, that they thought such a matter was the official's business and that a player should say nothing even though she were convinced that a mistake had been made.

(5) Seventy-three percent of the women indicated that a player has NO responsibility to report to the official that she touched the net on a play in volleyball when apparently the official did not see the action.

Again opinion expressed most often in defense of such a position was that this is a matter for the official to handle.

(6) Approximately one-third of the men approve of actual deception to gain an advantage.

This statement is based upon the responses made to a situation in which the clock was stopped in a college football game a few seconds be-

fore the half ended by a player "faking" an injury in order to gain a few more seconds of playing time.

Those who approved of such action stated that it was all right because commonly done and also showed "smart" strategy.

(7) Sixty percent of the college men and forty-five percent of the male adults approved of deliberately breaking rules when it appears that something might be "salvaged" out of a bad situation by so doing.

The above percentages approved of deliberate fouling on the part of a guard on defense in basketball when he finds himself outnumbered three-to-one by offensive players bringing the ball down the floor for a shot.

(8) About one-third of the men approved of "putting the pressure" on officials in basketball and baseball by booing, razzing, and/or buzzing him.

They believe that such action is the thing to do since many officials cannot "take it" and will call the close ones in favor of the home team in order to get relief from the pressure which is being applied.

This statement is based upon the responses obtained regarding two situations which were presented, the particulars of which were practically as stated above.

(9) Approximately three-fourths of the college men, one-half of the college women and two-thirds of the adult males approve of tactics designed to "upset" an opponent and throw him off his game if it can be accomplished.

This statement is based upon responses to situations described as taking place in tennis and badminton matches where players found that by delaying, stalling, etc. in various and sundry ways they were able to "irritate" and make the opponents nervous, thereby throwing them "off their games".

Most of those who approved of such tactics stated that such were a part of sports and that participants should learn to adjust to them.

(10) About one-third of the men approve of action which will prevent an opponent from performing at his best if it can be achieved within the letter of the rule.

This percent favored the practice of "boxing" of a runner in track in order to prevent him from running at the pace he desired to follow in order to run his best.

Such practice was described as "smart" and good strategy by those who approved.

(11) College men and male adults who have had "varsity" athletic experience have a poorer attitude about sportsmanship as defined in this report than do those who have not participated in such athletics.

This statement is based upon the fact that on nine of the ten items of the study the percentage of men who had had experience on varsity teams at the high school level and who recorded undesirable attitudes was appreciably higher than that of the non-athlete group so responding. The only item on which the responses were not appreciably different was that relating to booing while an opponent was attempting a free throw.

that relating to booing while an opponent was attempting a free throw. Twenty-three percent of both groups approved of such practice.

(12) It appears that the percentage of adult males who held what we have termed unsportsmanlike attitude in this paper is appreciably smaller than that recorded by the young men in the college classes.

This statement is based upon the fact that we have found it to be so on all of the items as we have compared the responses of the college men with data obtained from the adult male population of Baton Rouge.

(13) Seventy-five percent of the women interviewed in this study did not think that a player should refrain from taking advantage of an opponent who experienced a mishap during the contest.

This group stated that a player should return the ball for a kill shot if possible in a situation where her opponent has fallen to the ground and is helpless to continue the play for the point.

The attitude most frequently expressed was that such experiences were all a part of the game and so should be treated as such.

(14) Sixty-one percent of the women taking part in this study did not think it evidence of a lack of loyalty if alumni watching a football game in which their team was being beaten by a large score should leave the game during the third quarter.

Most of those who stated such a viewpoint held that the game was supposed to be entertainment and it ceased to be such for them when their team was hopelessly beaten. Therefore, they felt no obligation to remain until the end.

(15) Twenty-six percent of the women in this study did not think that spectators at a football game should respect the request of the visiting team for quiet so that their signals could be heard when the supporters of this particular team refused to grant the request of visiting teams for the same treatment at their home games.

The eye-for-an-eye - tooth-for-a-tooth philosophy was the essence of the reasons given for the attitude expressed by those who held for such action.

These data would seem to indicate the importance of more emphasis upon a positive and planned approach to Sportsmanship Education in which:

- (a) Stress is placed upon consideration of the "spirit" of rules as well as the letter.
- (b) More effort is made to offset the attitude that "it is smart" if you can get away with it.
- (c) Stress is placed upon the idea of sharing with officials the responsibility for seeing to it that contests are played according to the spirit of the rules.
- (d) Stressing the idea that the game, the contest, the thrill inherent in playing an opponent when he is at his best is the thing that counts most in sports.

RESEARCH EVIDENCE OF GAINS IN MOTOR FITNESS

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Motor Fitness Defined

It is not motor educability--the ease with which an individual learns new skills (9:84)--nor is it motor ability--the inherent motor skill for muscular reaction resulting in the manipulation of the body.

Barrow (1:6) indicates that "motor ability is the present acquired and innate ability to perform motor skills of a general or fundamental nature exclusive of highly specialized sports or gymnastic techniques."

Cureton (5:20-22) includes motor fitness as that one of the three (or four) aspects of physical fitness which assures (1) at least average capacity in a wide variety of fundamental motor abilities, (2) sufficient swimming ability to save a life, (3) at least average skill in the basic skills of running, jumping, climbing, crawling, and throwing, (4) and finally some specialized skills in social recreation. He goes on to state that motor fitness is a limited phase of motor ability which emphasizes (1) endurance, (2) power, (3) strength, (4) agility, (5) flexibility, and (6) balance. Good delineations of these factors are found in his "The Unfitness of Young Men in Motor Fitness."

Bookwalter (3:5) defines motor fitness as the ability to exert reasonable strength, speed, and fundamental skills of large-muscle type over reasonable periods of time.

For the purpose of this paper, motor fitness is that aspect of total fitness consisting of present endurance, strength, power, and agility of the large voluntary musculature which permits of averagely successful performance in the fundamental skills and in the common recreative and vocational activities. Motor fitness is over and above the prerequisites of proper nutrition and absence of disease or defect.

Factors in Motor Fitness

Cousins (4). By the Thurstone method of factor analysis 26 items of selected wartime fitness tests were analyzed. The criterion was the composite of their T-scores. One hundred and sixteen Indiana University freshmen men were tested.

The purported factors measured by these items were strength, speed, agility, endurance, power, balance, flexibility, coordination and cardiorespiratory endurance.

Four factors were isolated: arm and shoulder girdle strength, general dynamic strength, speed or velocity, and thigh flexor strength. These were later titled Arm Extensor Endurance, Power of Leg Extensors, Power of Hip Extensors, and Power of Thigh Flexors. Regression equations for predicting these factors from items having the highest intercorrelations were worked out. A predictive index for the combined factors is:

$$X_C = .4605 (\text{push-ups}) - 2.4539 (220\text{-yard dash}) - .5235 (100\text{-yard pick-a-back}) + .1578 (\text{sit-ups}) - 55.5485.$$

The multiple R is .8433.

From the items having the highest communalities a multiple R of .8983 was obtained. The predictive equation is:

$$X_C = .3063 (\text{push-ups}) + .0703 (16\text{-pound shot put}) + .1070 (2\text{-minute sit-ups}) - 8.3499 (75\text{-yard dash}) - .9570 (200\text{-yard shuttle}) - 99.4129.$$

A finally recommended four-item battery with an R of .9040 has the following regression equation:

$$X_C = 6.7252 (75\text{-yard dash}) + .0797 (16\text{-pound shot put}) + .1871 (3 \text{ standing broad jumps}) + .5601 (\text{dips}) - 91.9135.$$

Strength appears to be the most significant factor in agility. Pick-a-back appears to be primarily a measure of speed rather than of strength. Power events included in the study showed comparable correlations with speed and dynamic strength factors, supporting the commonly accepted definition of power as being equal to force times velocity.

The recommended batteries do not agree with those used in World War II.

Cureton (6). The author and others logically arrived at a list of factors involved in motor fitness, namely, endurance, power, strength, flexibility, and balance. Two tests were devised to sample all of these phases: (1) a 14-item test and (2) an 18-item test. Both tests were validated against a 30-item criterion. The multiple R for the 14-item test is .872 and the reliability coefficient was .912. The items involved were: (1) foot and toe balance, (2) squat stand, (3) trunk extension flexibility, (4) trunk flexion sitting, (5) extension press up, (6) man lift and let down, (7) leg lifts and sit-ups, (8) medicine ball put, (9) Illinois agility run, (10) skin the cat, (11) bar or fence vault, (12) chinning (pull-ups), (13) standing broad jump, and (14) mile run. Using these items, a standardized test was formulated with norms and standardized directions.

Wegner (13). A study was made of 28 motor ability items administered to 114 college freshmen. By the Thurstone multiple factor analysis technique, three factors were identified: (1) arm and shoulder girdle coordination, (2) leg speed, (3) upper body strength, and a fourth unidentifiable factor.

Twenty-five variables were adjudged as to their contribution to eight factors. The jury of 12 identified strength, balance, flexibility, hand-eye

coordination, speed, arm and shoulder coordination, and power. This was at variance with the factor analysis results.

Regression equations for the latter factors are: Arm and shoulder girdle coordination = $.3101$ (sandbag throw for distance) + $.2779$ (basketball throw for distance) + $.2572$ (softball throw for distance), $R = .7583$; leg speed = $.4307$ (120-yard hurdles) + $.2405$ (standing broad jump) + $.2744$ (dodging run), $R = .8214$; upper body strength = $.5506$ (12-pound shot put) + $.3876$ (grip strength), $R = .8323$.

The recommended three-item battery with an R of $.8892$ with the General Motor Ability criterion is: $X^0 = 1.1660$ (high jump in inches) + $.0432$ (backlift in pounds) + $.5828$ (push-ups) - 40.6473 .

Motor Fitness Status of College Men

Cureton (8). Motor fitness involves physical ability in balance, flexibility, agility, strength, power, and endurance in a variety of performances. Precision skills are not included. Each of these elements is carefully exemplified.

In 1941 one fifth of the Illinois service course participants couldn't chin 4.5 times or vertically jump over 18-1/2 inches. Physical fitness clinic men ranked at the 7th percentile on the Larson Dynamic Strength Test on the average; the general university population ranked at the 68th percentile. Nearly 37 per cent were functionally unfit on the Schneider test. Seventy-three per cent could not swim 440 yards. About 68 per cent could not dip eight times or run 100 yards in 13.8 seconds. More than half could not climb a 20 foot rope in 25 seconds. Seventy-eight per cent could not do the extension press up.

On the Illinois Motor Fitness Screen Test (including (1) squat stand, (2) trunk extension flexibility, (3) trunk flexion, (4) dive and roll, (5) extension press up, (6) medicine ball put, (7) chinning, (8) man lift and let down, (9) leg lifts and sit-ups, (10) skin the cat, (11) bar or fence vault, (12) foot and toe balance, (13) mile run—7-minute, and (14) standing broad jump) reliability = $.912$ and $R = .872$. A greater percentage of improvement was recorded in balance and endurance items and least in power items. The poorest 30 per cent failed eleven items (rated below 4 on physique and were unable to swim 75 yards). The middle 30 per cent failed eleven items and failed to swim 100 yards. The top 40 per cent passed these three requirements.

Of 2,628 entering men at Illinois in September, 1942, 35.84 per cent were classed as failures, 23.71 per cent were restricted, and 40.45 per cent were rated satisfactory. Every item in the screening test discriminated. Over two-thirds stated they could not swim 100 yards and by test 59.25 per cent failed to do so.

Cureton concluded that unfitness was appalling. Physical training programs lacked vigor due to lack of time, leadership, facilities, and too great an emphasis upon social activities in classes.

Stafford (12). The University of Illinois staff in physical education

concerned with the fitness of their students for the Armed Services studied the vigor of their elective program of activities.

There were 38 activities from which the students elected their requirements of course work. These were classified as to their degree of vigor. The least vigorous were archery, bait and fly casting, bowling, clog dancing, golf, leisure sports, and social dancing. The more vigorous activities were apparatus stunts, boxing, individual athletics, individual tumbling, life saving, and wrestling. The criterion for this classification was the Larson Dynamic Strength Test of chins, dips, and vertical jumps (all weighted).

The percentages of students rating excellent on this test in the less vigorous activities were from 0 (archery, clog dance) to 7.66 (bait and fly casting). For the vigorous activities, from 21.62 (life saving) to 11.28 (wrestling).

The percentage of students rating very poor on the test for the least vigorous activities was from 21.51 (bait and fly casting) to 3.52 (social dancing). For the vigorous activities the percentages of students scoring very poor ranged from 0 (apparatus stunts, individual athletics, life saving) to 3.11 (wrestling).

Critical ratios were computed for differences between strength test means of the eight vigorous activities and those of 19 less vigorous activities. Seventy-three per cent of the differences were significant at a high level of confidence.

The department staff concluded that the Larson test was a good classifying instrument. It was further concluded that students taking the more vigorous courses tend to possess greater functional strength.

Contributions of Activities to Motor Fitness

Bookwalter (2). Due to World War II a physical fitness program was instituted at Indiana University in January, 1942. One hour daily was required of all men not specifically exempted. Three days were devoted to "developmental" (body building) activities. Two days were devoted to "recreational" (game) activities.

Motor (physical) fitness was considered to include strength, velocity, motor ability, proper weight and height, and endurance. A broad testing and measuring program was instituted to evaluate specific achievement of these results. Some 800 to 900 men were involved.

Test Results, Original Battery

Item	March		August Final Results	
	Initial	Beginners	Advanced	
Burpee	5.32	7.21 - 36%	7.24 - 36%	
Push-ups	16.88	20.75 - 23%	21.53 - 27%	
Pull-ups	7.02	8.36 - 19%	8.82 - 26%	
Brace M.A.	14.63	17.31 - 18%	17.45 - 19%	
Vert. Jmp.	18.82	21.45 - 14%	21.70 - 15%	
G.M.Q.	97.30	105.30 - 8%	105.51 - 8%	
Std. Brd. Jmp.	83.60	88.96 - 6%	90.47 - 8%	

Test Results, Added Items

Item	June Initial		August Final Results	
	Begin.	Advanced	Beginners	Advanced
Dips	4.49	5.43	6.21 - 38%	6.81 - 25%
Larson D.S.	284.80	302.80	310.40 - 9%	325.90 - 8%
60-Yard Dash	8.33	7.91	7.81 - 6%	7.73 - 2%
2-Mile Walk	23.75	23.84	22.60 - 5%	23.28 - 2%
440 Yards	69.60	67.80	67.10 - 4%	66.80 - 1%
Drop Off	9.09	9.15	8.83 - 3%	8.74 - 4%

1. Significant gains in every item in both 2 and 5 months.
2. Strength and motor ability, greatest percentage gains.
3. Endurance, velocity, and walking events least gains.
4. Advanced classes continued gains, but at reduced rates.
5. Motor fitness objectives, as measured, were attained to a marked degree.

Cureton, et. al. (6). A study was made to provide statistical and kinesiological evidence of the values of selected exercise in promoting endurance in young men during World War II.

Twenty-nine events of static muscular endurance, rhythmic muscular endurance, long distance running, power running, and cardiovascular response types were analyzed to study their reliabilities, inter-relationship, factors, norms, and validities. The entire battery constituted the criterion for assaying validity. Over 4,500 men were tested.

Among the better items were mile run, .708; chinning, .647; floor push-ups, .638; hops, .634; dips, .622; forearm push-ups, .620; sitting tucks, .600. A combination of chinning, side leg raisings, backward leg raisings, and mile run has the best predictive index, .924. Fifteen of 28

items had reliabilities of .80 or better, of which three items (tucks, press-ups, and dips) were .90 or more.

The step test and Schneider test were found to be poor predictors of muscular endurance. Several testings were found to be necessary for reliable measurement to be established. Initial gains are considerably below physiological capacity and college men averaged 9.43 per cent higher on standard scores than did high school boys, largely due to higher incidence of mesomorphy in the former. Evidence seems to indicate no damage due to endurance training.

Much of the improvement in endurance could be attributed to improved coordination according to Steinhaus. Mesomorphs, medials, and ectomorphs have much greater capacity than do endomorphs and feminoids. Extreme endomorphs are vastly inferior.

Gains due to educational improvement were 3.04 per cent in standard scores, due to physiological improvement were 3.46 per cent, and final spurts due to motivation averaged 2.96 per cent.

Landiss (9). This article presents an analysis of the effect of eight physical education activities (elementary courses in swimming, boxing, weight training, tennis, wrestling, volleyball, tumbling-gymnastics, and a basic course in conditioning) on physical fitness and motor ability scores of male college freshmen. The motor ability test was the Larson Test of Motor Ability; the physical fitness test was a slight modification of the Air Force PER test. The mean gain of each group on both tests and individual tests were computed. The mean gain of each group was compared with each of the other groups and significance of differences was determined. The results seemed to indicate that of the activities studied, tumbling-gymnastics and conditioning best developed those abilities measured by the physical fitness test; while tumbling-gymnastics and wrestling best seemed to develop those abilities measured by the motor ability test.

Sills (11). Thirty-three male freshmen who made low scores on the physical fitness tests (sit-ups, pull-ups, 100-yard pick-a-back, 300-yard shuttle run) when they entered the University of Iowa were given special conditioning exercises. The conditioning exercises were: pull-ups, two minute sit-ups, 220-yard run, 440-yard run, 660-yard run, 880-yard run, mile run, arm curls with heavy resistance and pull-overs with heavy resistance (supine), and push-ups. Their progress for one semester was compared to that of 33 students taken at random from freshmen students who participated in regular physical education classes.

The experimental group gained an average of 17 points in comparison to an average gain of 11 points by the control group when the tests were repeated at the end of the semester.

A low positive correlation was found, for the experimental group, between "gains" in physical fitness and grade point average.

Summary

Definition. Motor fitness is an aspect of physical fitness which is in turn a phase of total fitness. Motor fitness consists of endurance, strength, power, and agility of the large muscles in common recreative and vocational activities.

Cousins (4) isolated the factors of arm extension endurance, power of leg extensors, power of hip extensors, and power of thigh flexors as the factors in fitness of college men. A regression equation for the 75-yard dash, 16-pound shot put, 3 standing broad jumps, and the dips produced an R of .904 with a fitness criterion.

Cureton and others (6) logically determined the factors of motor fitness to be endurance, power, strength, agility, flexibility, and balance. Cureton established 7-item, 14-item, and 18-item tests for its assessment.

Motor fitness status. Cureton (8) found Illinois physical fitness clinic men to rank at the 7th percentile and general university population at the 68th percentile on the Larson Dynamic Strength Test. On the Illinois Motor Fitness Screen Test improvement was better on the balance and endurance items and least in the power item. Of 2,628 freshmen, 35.84 per cent were failures, 23.71 per cent restricted, and 40.45 per cent were satisfactory on the latter test. Over 59 per cent could not swim 100 yards. He concluded that unfitness was appalling.

Stafford (12) found that the Illinois men of greater fitness elected the more strenuous sports and that the weaker men elected the least vigorous sports. The differences had high statistical significances.

Bookwalter (2) found significant gains in both two months and five months through fitness activities. Strength and motor ability gains were greatest and endurance and velocity gains were the least. Advanced fitness classes continued to gain but at reduced rates and motor fitness objectives were being attained to a marked degree.

Cureton (6) found the mile run, chinning, floor push-ups, hops, and dips to be the better predictors of endurance. Repeated testings gave greater reliabilities than single testings. Improvement due to education was 3.04 per cent, that due to physiological conditioning was 3.46 per cent, and final spurts due to psychological motivation was 2.96 per cent.

Landiss (9) found tumbling-gymnastics, conditioning, and wrestling to be more developmental of physical fitness and motor ability than were elementary swimming, boxing, weight training, tennis, and volleyball.

Sills (11) reports that 33 low-scoring entering freshmen, given conditioning work, gained 17 points compared to the 11 points of the control sample of 33 students from the regular classes.

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EFFECTS OF SPECIFIC SPORTS UPON FITNESS

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(Sub-Committee Report)

This group was faced with the task of assembling materials for determining the effects of specific sports upon fitness. No attempt will be made to define physical fitness, but this report will confine itself to this phase of total fitness. It is not possible to present the relationship between physical fitness and each of the many sports; consequently, certain of the activities will be eliminated at this time.

Since swimming holds a very unique position for the development of physical fitness, it will be discussed first. This activity can be utilized for those with very little fitness, such as post-operative cases and polio victims, as well as for those with a high degree of fitness such as varsity athletes. The water, as you know, supports dead weight in proportion to the buoyant effect of the displaced water. Much of the material in this section of the paper will be taken from studies described by Cureton in "The Contribution of Swimming to Physical Fitness."^{1/}

The developmental effect of swimming for those with low fitness has been demonstrated repeatedly and is one of the modalities of those working with the rehabilitation of polio patients. Ricker,^{2/} in his Master's study at the University of Akron in 1930 found that those boys taking swimming in the secondary schools increased their mean vital capacity 57 per cent more than a similar group who were engaged in gymnastics alone.

Alice Bonar,^{3/} in a study in 1932, demonstrated that one semester of swimming will increase the Sargent Jump 3.08 cms. which is significant at the .01 level of confidence. This study was made, using 132 University of Illinois female coeducational students. Swimming increases the muscular endurance of the swimmer as has been demonstrated by

^{1/} Thomas K. Cureton, "The Contribution of Swimming to Physical Fitness," unpublished mimeographed paper. 20 pp.

^{2/} L. D. Ricker, "Swimming as a Factor in Physical and Health Education," unpublished Master's thesis, Akron University, Akron, Ohio, 1930. 33 pp.

^{3/} Alice Bonar, "The Effects of Swimming Upon Vital Capacity and Physical Efficiency of University Women Students," unpublished Master's thesis, University of Illinois, Urbana, Illinois, 1932. 35 pp.

Kong^{4/} in 1953 at Illinois. He used the swimming team members and this research covered a period of four months — one swimming season. He found that the swimmers gained 12.2 per cent in squat jumps and 106.1 per cent in extension press-ups. These gains, incidentally, are standard score gains. However, care must be taken when interpreting these results. All subjects exerted themselves to the utmost at each test period and perhaps part of this increase in the squat jumps and press-ups might be due to this maximum effort. He also found that gains in physical fitness were paralleled by marked gains in swimming ability.

One of the most important effects of swimming is its value in improving circulation. The heart and blood vessels become able to circulate more blood per minute because the blood vessels take up an improved tone. Another value is the effect of swimming on metabolism. Nielsen,^{5/} in a Master's study at the University of Illinois, found that swimming in cool water (60-75° F) stimulates metabolism. She found an average increase of 5.37 per cent in 22 young women in a typical one-semester course in intermediate swimming. Increased basal metabolism is important both in becoming physically fit and in keeping physically fit. Increased basal metabolism reduces the fat in the swimmer, particularly if the activity takes place in colder water. Bender^{6/} confirmed this hypothesis in a further study. His subjects were on a progressive endurance training experiment for a period of 12 weeks. In these metabolism experiments, an increase of 5 to 10 per cent in basal metabolism appears to have great influence in reducing fat over a period of time.

Physiological fitness or condition of the 1936 Olympic swimmers was shown by Cureton and also by Krizan to be superior to college varsity swimmers.^{7/} This was verified by McCurdy and Larson in their study on the same swimmers.^{8/} Both studies agree on the great importance of good cardiovascular fitness.

4/ Mooney Kong, "Physical Fitness Improvement of Varsity Swimmers from a Season of Training," Research project in Physical Fitness, School of Physical Education, University of Illinois, Urbana, Illinois, 1953.

5/ Lorainne Nielsen, "The Effect of Swimming on the Basal Metabolism of College Women," unpublished Master's thesis, University of Illinois, Urbana, Illinois, 1950. 198 pp.

6/ Jay Bender, "Effect of Exercise Upon Basal Metabolism," unpublished Doctoral dissertation, University of Illinois, Urbana, Illinois, 1951. 124 pp.

7/ Thomas F. Krizan, "Comparison of Olympic and Varsity Swimmers on Physical Fitness Characteristics," unpublished Master's thesis, University of Illinois, Urbana, Illinois, 1948. 53 pp.

8/ J. H. McCurdy and L. A. Larson, Physiology of Exercise, Philadelphia: Lea and Febiger, 1939. p. 244.

Most physical educators accept strength as a component of physical fitness. Wilks,^{9/} in a study at Springfield College, to determine the effect of a weight training program on the speed of swimming the crawl stroke for a distance of 40 yards. Two groups of varsity swimmers were equated on the basis of time for the 40-yard swim. One group engaged in a weight training program, using exercises that would strengthen the shoulder extensors, which are responsible for the propulsive phase of the crawl arm stroke. Both the control and the experimental groups continued to participate in their regular training program as prescribed by the coaching staff. The subjects were tested each week, for time in the 40-yard swim, and the strength of the shoulder extensor muscles. The weight training program consisted of five exercises done with a 12-pound barbell in each hand, and as many repetitions of each exercise as possible were executed. The exercises were as follows: shoulder extension, shoulder flexion, adduction and abduction of the arms in the transverse plane, and flexion and extension of the arms.

The increase in strength of the shoulder extension muscles of the experimental group, from the initial test to the final measurement was statistically significant beyond the .01 level of confidence. The associated decrease in time for the 40-yard swim from the beginning of the experiment to the end was statistically significant beyond the .01 level.

The control group, those not participating in the weight training program, increased in both the shoulder extensor muscle strength and the time for the 40-yard dash, statistically significant at the .05 level of confidence. This study has shown that an increase in strength of the shoulder extension group will decrease the time in swimming the 40-yard crawl stroke.

Another study of interest, and closely related to the previous one, is that of Ness and Sharos.^{10/} This study involved thirty members of the Springfield College varsity basketball team. It was believed that increase of leg strength would increase the vertical jump, which is so necessary to success in basketball. The subjects were divided into two groups, equated on the basis of the Sargent Jump. One group trained using the weights and the other group did no formal training. The experimental group conditioned for four weeks, three times per week and performed two exercises: deep knee bends and toe raising. Resistance was applied by using a barbell across the shoulders and the amount of resistance varied with each subject. The amount of weight was such that each subject could perform more than five but less than ten repetitions.

9/ Eugene R. Wilks, "A Study to Determine the Relationship Between Increase in Strength of the Muscles Involved in Crawl Stroke Swimming and Speed in Swimming the Crawl Stroke for a Distance of 40 Yards," unpublished Master's thesis, Springfield College, Springfield, Massachusetts, 1956.

10/ Philip E. Ness and Charles L. Sharos, "The Effect of Weight Training on Leg Strength and the Vertical Jump," unpublished Master's thesis, Springfield College, Springfield, Massachusetts, 1956.

These exercises were repeated three times with one minute rest between each bout. The measuring instruments were the Sargent Jump, the leg strength, and the ankle plantar flexion strength tests.

The experimental group increased their Sargent Jump by 3.23 inches with a t of 5.37 which was statistically significant at the .01 level. Leg strength also increased 215.46 pounds, significant beyond the .01 level. The ankle plantar flexion strength more than doubled: from 158.18 to 328.63, with a t of 12.92, showing significance well beyond the .01 level of confidence.

The control group decreased, during the same period of time, .09 inches in the Sargent Jump. Leg strength increased 25.24 pounds, while the plantar flexion strength increased 40.24 pounds. None of the increases or decreases was statistically significant.

Another study showing the effects of specific sports upon fitness was completed at the University of Southern California by Frank B. Jones.^{11/} This study was made to determine the persistence of physiological condition after the cessation of exercise regimens. One group of 26 healthy, male university students who engaged in a 6-1/2 week weight-training program. This exercise regimen induced significant changes in the physiological condition of all subjects.

Fourteen basketball players - varsity and freshmen - of the University of Southern California were the subjects in the second group. These players competed in a 20-week period of training and competition in the intercollegiate basketball program. All subjects were in good to excellent physiological condition as shown by high scores on the physiological tests of fitness. This condition was measured by response to (1) Harvard Step Test, (2) Army Air Force Physical Fitness Test, and (3) Hand Dynamometer Strength Test. The physiological condition of the Weight-training group was measured at the end of the exercise regimen and again 8 weeks after the cessation of training. Physiological condition of the Basketball group was measured at the end of the basketball season and 4, 6, and 11 weeks after the last basketball game.

Eight weeks after the cessation of frequent, regular exercise, the physiological condition of all the subjects of the Weight-training group was for the most part unchanged. No statistically significant changes in physiological condition were observed in all measures except the mean score of the shuttle-run portion of the Army Air Force Physical Fitness Test.

The level of physiological condition of the Basketball group did not persist as consistently as did the physiological condition of the Weight-training group. No statistically significant decrease in physiological condition was observed as measured by the resting systolic and diastolic blood pressures, blood pressures following the Harvard Step Test exercise, muscular strength as measured by the hand dynamometer

^{11/} Frank B. Jones, "An Investigation of the Persistence of Physiological Condition After Cessation of Exercise Regimes," (personal correspondence from Dr. John M. Cooper).

and the mean scores of all items of the Army Air Force Test. Decrements in physiological condition as a result of the cessation of training were found in the resting pulse rate and the pulse rates after the Harvard Step Test exercise.

The following conclusions may be drawn from this study: (1) Physiological advantages gained from regimens of exercise are not lost immediately when the exercise regimens used in the present study are stopped abruptly, and (2) Higher levels of physiological condition do not persist as consistently as do moderate levels of physiological condition.

The next two studies were completed at the University of Southern California by Wells^{12/} and Wessel^{13/}. The work performance of man in tasks which are fatiguing is generally considered to be affected by his physical condition. Whether or not this relationship is applicable in tasks of mild muscular activity is problematical. Similarly difficult to assay is the relationship between deterioration of physical condition and the work performance of prolonged tasks requiring only mild muscular activity.

Piloting very long-range flights in aircraft may be classified as work of low muscular intensity. This prolonged mild work is known to be fatiguing, but the influence of physical conditioning upon the performance of this type of work has not yet been determined adequately.

The subjects were twenty precadets at the School of Aviation Medicine, Randolph Field, Texas. The subjects were divided into three groups. One group, consisting of nine subjects, underwent a rigorous training program for a one-month period, which significantly improved their fitness for severe muscular exercise. The second group, consisting of seven subjects, was hospitalized for a similar period, during which they were confined to bed rest. This program provided a change in activity but only slightly decreased their ability for vigorous exercises. The third group, consisting of four subjects, served as controls; these subjects continued military duties of a clerical nature, which did not alter their fitness for vigorous exercises.

Before the experimental regimens of physical activity were instituted, subjects in all groups performed a seven-hour simulated flight in a Link Trainer. Flight performance scores and multiple electromyographic recordings of the activity of the major muscles involved in pilot control movements were made during the flight. This flight was repeated at the conclusions of the four-week experimental activity regimens. Flight performance scores and the electromyographic records obtained were compared with those of the previous flight and the effects of the various regimens of physical exercises were studied. An analysis of these data supports the following conclusions:

^{12/} J. Gordon Wells, "Physical Condition as a Factor in Pilot Performance," (personal correspondence from Dr. John M. Cooper).

^{13/} Janet Wessel, "An Investigation of the Relationship Between Man's Fitness for Strenuous Work and High Headward Acceleration," (personal correspondence from Dr. John M. Cooper).

1. In this study, changes in physical fitness for strenuous muscular work were unrelated either to flight performance proficiency of a simulated seven-hour Link Trainer flight or to the manner in which this task was performed.

2. In general, individuals who are highly skilled in tasks requiring muscular work of low intensity will perform well, whether their general physical condition is moderately improved or deteriorated. This generalization holds true even in tasks of fairly long duration. Apparently there is very little relationship between skill and physical condition in activities requiring muscular work of low intensity.

3. Economy of effort, in terms of reduced muscular intensity, was observed to be directly related to success in performance. The subjects who employed the greatest amounts of muscular activity in the performance of the flight task were the ones who most often failed in the performance of the task.

4. The multiple electromyograph was demonstrated to be a useful tool in studying the performance of man at work under varying conditions of stress.

Wessel made her investigation (1) to determine the effects of a systematic training program on G-tolerance, (2) to ascertain the influence of cessation of systematic training on G-tolerance, and (3) to find the relationship between fitness for strenuous work and G-tolerance.

The results of the investigation indicated that improvement in fitness for strenuous work by systematic training increased G-tolerance. The cessation of frequent and regular exercise decreased G-tolerance and, to a lesser extent, fitness for strenuous work. A slight but consistent relationship was found between fitness for strenuous work and G-tolerance. Subjects more fit for strenuous exercise tended to be fit for high headward acceleration.

Fitness for strenuous work and G-tolerance was determined for each subject before and after a systematic training program and again 8 weeks after the program had ended.

Fitness for strenuous work was measured by means of scores on performance tests — Harvard Step Test, the Army Air Force Physical Fitness Test, and Hand Dynamometer Strength Test. For subjects who greyed out, G-tolerance was measured by observing grey-out time at $-5G$; for subjects who did not grey out, G-tolerance was measured by the levels of earopacity at the end of a 30-second centrifuge run at plus $5G$ and during an 8-minute recovery period, and by pulse rates during an 8-minute recovery period.

The subjects were 23 in number and were healthy, male, university students. Of these, twenty-one were used in the comparison of fitness measures and eighteen were used in the comparison of G-tolerance measures before and after the systematic training program; fifteen subjects were considered in the comparison of fitness and G-tolerance measures at the end of the training program and 8 weeks after training had stopped.

Analysis of fitness measures showed a significant increase after

6-1/2 weeks' systematic training program. Pulse rates and diastolic blood pressures after performance on the Harvard Step Test decreased as a result of training.

G-tolerance measures showed a significant increase after 6-1/2 weeks' training program. Of the thirteen subjects who endured plus 5G for 30 seconds, eleven show improvement in the earopacity measured after training and two did not. Five subjects who greyed out before 30 seconds at plus 5G before the training period showed improved ability to withstand high headward acceleration after training. The proportionate degree of improvement in fitness and G-tolerance varied from subject to subject, as shown by a low rank-order correlation.

Eight weeks after the training program was discontinued a significant drop-off in fitness was noted, as measured by the Army Air Force Test. No significant drop-off in fitness as measured by the Harvard Step Test and Hand Dynamometer Strength Test was found. Changes in pulse rates and blood pressures after the Harvard Step Test were not significant.

The subjects' G-tolerance showed a significant decrease 8 weeks after training had stopped. In the subjects who endured plus 5G for 30 seconds the earopacity measures showed greatest displacement and pulse rates were higher during and after exposure to G 8 weeks after training was discontinued. Group performance on the plus 5G for runs showed no great change 8 weeks after training had stopped. Thirteen subjects endured plus 5G for 30 seconds in both test periods; one subject greyed out in approximately the same time in both test periods; one subject who endured plus 5G for 30 seconds at the end of the training period greyed out in 8 seconds 8 weeks after training stopped.

Fitness scores alone are not a reliable measure of a flyer's ability to withstand high headward acceleration. However, to maintain G-tolerance at the highest possible level, a flyer should be in good physical condition.

These two studies, although not directly related to a specific sport, together with those studies by Clarke, Mathews, and Shay,^{14/}, ^{15/}, ^{16/}, on strength loss following exercise, are basic to the field of sport fitness.

^{14/} Donald K. Mathews, Clayton T. Shay, and H. Harrison Clarke, "Relationship Between Strength Loss in Pack Carrying and Certain Motor-Physical Fitness Criteria," Research Quarterly, 26:426-439, December 1955.

^{15/} H. Harrison Clarke, Clayton T. Shay, and Donald K. Mathews, "Strength Decrements from Carrying Various Army Packs on Military Marches," Research Quarterly, 26:253-265, October 1955.

^{16/} _____, "Strength Decrements from Wearing Various Army Boots and Shoes on Military Marches," Research Quarterly, 26:266-272, October 1955.

THE EFFECT OF PHYSICAL ACTIVITY UPON THE PHYSIQUES OF PARTICIPANTS IN COLLEGE PHYSICAL EDUCATION PROGRAMS

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One of the most important questions that arises in respect to this topic is the degree to which body build may be modified by physical activity. There is no doubt that participation in a physical education program will have an effect upon the physique of the participant. The exact effects obtained will, of course, be determined by the nature of the activity. Unfortunately there has not been much research done to answer the question: What changes, or modifications, are possible? The majority of studies in this area have approached the problem from the standpoint of existing relationships. Relatively few longitudinal studies have been made to determine the effect of physical activity upon physique.

One of the most impressive facts about this particular topic, therefore, is the absence of research of a kind that would enable this committee to give adequate answers, although the studies reported here definitely indicate that there are relationships which should be observed in planning and administering physical-education programs.

In view of the numerous techniques that have been used in determining the present relationship of body build to performance, all that remains to be done is to utilize these techniques in evaluating the physiques of the men who participate in college programs. Data of this kind, collected at the beginning and at the end of a semester, would tend to clarify the relationship of participation in physical-education activities to physique.

Factors concerning physique which could very well be investigated include the following: first, body weight (fat); second, the musculature of the body (strength); third, body build (somatotype); and fourth, body mechanics.

PART I

Body Fat and Physical Activity. The immediate problem in relating fitness to body fat is the problem of determining normal body weight. There are a number of age, height, and weight tables that have been used in the past; however, a majority of these have been considered unsatisfactory. Two methods which have been suggested, one by McCloy (6) and the other by Cureton (2) make it possible to determine the normal weight of the individual. Both of these methods involve the use of anthropometric

measurements including the evaluation of the fatty tissue on the subject's body.

Kireilis and Cureton (3) used Franzen calipers to measure the external fat of three relatively fat students. After six weeks of strenuous running, there was a definite trend for the external fat to diminish. It was concluded that fat is a real handicap for most strenuous exercise and, also, pointed out that weight is not necessarily a good guide in fat loss because fat loss may be compensated for by increased muscle density as a result of exercise. In a study by Sills (7) at the University of Iowa, nine students who were overweight, as determined by the McCloy (6) method for predicting normal weight, were given special conditioning exercises over a period of four months. All nine of the students were more than 20 per cent overweight at the beginning of the four-month period. At the end of the four-month period the mean loss for the group was 13 pounds, or 6.5 per cent. During this same period the mean gain for these students on a physical fitness test (situps, pullups, 300-yard shuttle run, 100-yard pick-a-back) was 16.42 points, or 148 per cent.

In unpublished doctoral dissertations by Klotz(4) and Brady (1) the problem of "dead weight" was studied. In both studies it was found that the addition of dead weight to the normal body weight of the individual resulted in poorer performances.

It has been stated (8) that in order to wear off a pound of fat a considerable amount of work is necessary. The implication of this statement has discouraged many people from attempting to control their body weight by means of exercise. Recently Mayer (5) has pointed out the role of exercise in controlling body weight, and has emphasized the fact that exercises are important. On the basis of these and other studies, it would seem that participating in physical activity regularly would enable an individual to control his body weight within normal limits.

PART II

Body Musculature and Physical Activity. A discussion of the musculature of the body immediately brings into consideration muscle strength. Morpurgo (6) found that a 7.7 per cent increase in the cross section of a muscle may be caused by hypertrophy of the fibers, while Petren (8) has indicated that some of the increase in size is due to an increase in the number of capillaries. There have been a number of studies on human subjects demonstrating the increase in the cross section of a limb as a result of heavy resistance exercise. In one of these, DeLorme (3) and his fellow workers measured the response of the quadriceps to progressive resistance exercise in poliomyelitic patients. For eight of the subjects, who developed nearly normal power by exercise, a substantial increase in thigh circumference was recorded.

One of the most critical studies of the effect of weight training on human subjects is that by Tanner (9) in which he found that there were

considerable individual differences in response. The largest increase was in upper arm circumference, while it was found that the calf circumference decreased in all subjects. Tanner also found that one of his subjects gained weight during training, and suggested that the gain may have been caused by the stimulation of the subject's appetite, or to some other reason not known to the investigators. Kohlrausch (5) found that men high in linearity have greater difficulty in increasing cross-sectional measurements than do those who are already very muscular.

Heavy resistance exercises hypertrophy the muscle fiber, which causes an increase in the cross-section area of the muscle. In an obese person this increase would not be demonstrable by means of external girth measurement. In fact, the girth measurement would probably decrease following a period of weight training. The changes in physique that may be effected by resistance exercises will be dependent upon the subject's anthropometric status prior to participation in such a program.

The increase in the cross-section area of the muscle (by resistance exercises) is accompanied by an increase in strength. Better performances in many activities are dependent, in part, to increased strength as indicated in studies by Capen (1), Chui (2), Keller (4), and O'Connor (7).

PART III

Somatotype and Physical Activity. Cozens (1), Cureton (2) (3), Lindegaard (7), Miller (8), Sills (11) (12), Tappen (14), and Willgoose (15) (16) have examined the relationship between body types and physical performance. There are numerous other authors that could be included in this list.

Some investigators have depended upon anthropometric measurements, some upon somatotyping, and others upon a combination of the two. There is little doubt that the latter is the most desirable method to use.

No combination of anthropometric measurements, or indices, have been devised to clearly define body types. Efforts to select a satisfactory set of measurements that would accomplish the same purpose as Sheldon's (10) procedure have failed.

Although there are a few investigators who are critical of Sheldon's method of body typing, the majority of research workers who are attempting to relate body types to physical performances has accepted it. With the improved photogrammetric techniques which have been developed by Dupertuis (4), Tanner (13), and Gaven (5), it is possible to obtain a photograph for somatotyping and, simultaneously, valuable anthropometric measurements.

The following generalizations summarize reasonably well the relationships that have been observed: Endomorphy, which is characterized by an excessive amount of fat, is a limiting factor in the performance of most skills; ectomorphy, characterized by leanness and

muscular weakness, is also a limiting factor; and mesomorphy, characterized by muscular strength, is a contributing factor to the good performance of many skills. A combination of mesomorphy and ectomorphy may be a greater asset in some instances than mesomorphy alone.

Varying degrees of masculinity, as indicated in Seltzer's (9) study, will affect physical performance. This factor must be seriously considered and efforts to increase masculinity through physical activity should be attempted, particularly in view of the position taken by some investigators that exercise will not be influential in changing the body build of the student who is low in the masculine component.

PART IV

Body Mechanics and Physical Activity. Blesh (1) has stated that one of the most important problems in respect to an individual's posture is that of understanding good body mechanics, and that once this understanding has been realized, the subject must develop the strength and coordination necessary to assume and maintain good mechanical positions. In the studies which have been done with the Photometric equipment at Yale (2), each freshman has a photograph (four views) taken which is carefully analyzed. On the basis of this analysis, the subject participates in activities, and is given instruction, that makes it possible for him to improve his body mechanics.

Methods for evaluating posture have been devised by Goff (3), Kellogg (4), McEwan (6), Massey (5), and many others. Some of these methods are subjective, some semi-objective, and others objective. The selection of any one of these methods is determined largely by the experience of instructor, and the available facilities.

Dr. Joseph B. Wolffe, in a personal communication to the author, has indicated that physical activities which serve to prevent undesirable body mechanics may also reflect upon the efficiency of the vascular system. The numerous orthopedic problems that result from bad mechanics are so evident that they need not be discussed in detail. There is one problem, however, which is rapidly becoming critical — that of low back pain. Larson (7) has suggested resistance exercises as a method of treatment, and on the basis of his analysis and those of others who agree, it would appear that the inclusion of the proper kinds of activities and exercises in the college program would serve to reduce or eliminate this problem.

Summary. This paper was divided into four parts for discussion, although each is closely related to all of the others.

Some of the major points made by the committee in their personal communications with the chairman follow:

1. Exercise is important in the control of body weight but does not take the place of diet.
2. The cross-section area of muscle may be increased by exercise.

3. The soft tissues of the body may be affected by exercise to the extent that body type may be modified.
4. Body mechanics (posture) may be improved by participation in physical activity.

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IMPROVEMENTS IN CARDIOVASCULAR CONDITION OF HUMANS ASSOCIATED WITH PHYSICAL TRAINING, PERSISTENTLY PER- FORMED SPORTS AND EXERCISES

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INTRODUCTION

Preliminary View of Evidence for the Im- provement of the Normal Heart and Circulatory Functions

Several types of evidence are available which show that the heart and circulation may be improved by exercise. The main limitation is that the exercise must be relatively hard and performed long enough to produce a moderate stress effect in a single bout, and continued frequently enough for physiological adaptation to take place. Physical education and coaching experience, coupled with laboratory testing, bring us ever closer to the time when fairly exact exercise prescriptions will lead to predictable results. A review of the evidence at this time shows us how close we are to this goal.

Some of the evidence can be interpreted as improving the heart itself, while most of the evidence relates to improving the autonomic tone of the nervous system, the ability of the body to hold its blood evenly distributed, to show little fatigue over long periods of working, to develop a high rate of circulation in hard exercise, and to recuperate quickly. These are, in fact, the five main components of cardiovascular condition.

It has been hard to understand the evidence because of the diverse views: the medical view looking mainly at the disease aspects and seeing only pathology; the coach seeing only the marvelous capacity of the trained athlete to bear almost any amount of work; and the physical educator seeing the improvement of individuals who, undiseased, make the effort of normals to improve their function by resorting to graduated progressive exercise, many times in the water. The results obtained by the various professional methodologies are not the same, seen from these different angles.

The "athletic heart" with its long history of confusion, makes clear thinking difficult. Although this position has formally been renounced by the medical profession, we are still without the positive evidence, easily available, which shows the benefits derived from progressive athletic training. Some have the view that any type of physical activity will develop circulatory fitness, when the evidence shows that only endurance

activity develops the characteristics of "organic stamina" (endurance). A review of the evidence is sorely needed as presented from all of the points of view named. This review is from physical education and athletics, limited to male data of the 15-60 year age span, corresponding to young men and middle aged men worked with on the University campus.

The fact that cardiac hypertrophy has been recently (1955) shown by Drs. Travis Winsor and George L. Beckner (107), of Los Angeles, to be present in normal healthy (undiseased) marathon runners, along with enlarged R and T waves in the precordial leads, confirms data obtained in 1948 and presented by Cureton (33) even earlier. Changes of this type, brought about by long and hard training have awakened interest because such changes have not always been viewed by disease doctors as "normal physiological adaptations." Whereas, certain experimenters working in the field of physical training and competitive sports have long viewed such enlargements as normal.

J. B. Wolfe, et al, (109) reported after taking Roentgenograms and classifying the hearts of 196 athletes that the deviations from normality tend to increase with age and were highest in the 40 to 59 year group of subjects who had participated in strenuous sports. That such variation could have any pathological significance is yet to be proved because of the complete lack of functional tests, disease history, or clinical death records. Phillips (86) has shown with as many cases, using the same methods, that such progressive enlargement occurs in normal subjects who have not had strenuous athletic careers. With steadily increasing resistance of the aortic tree as age advances, and progressively higher peripheral resistance, most hearts will enlarge in size. Baley (6) has shown, by tabulating several hundred cases of Cureton's data, the progressive decline which comes to men as they advance through middle age.

Heart size is an unreliable guide to cardiovascular improvement. Noting the relatively large hearts of Roger Bannister (+ 25%), Herbert McKenley (+ 15.1%), Robert Rehberg (+ 11.7%) and others, we might suppose that the type of athletic work brought about the hypertrophy. It is possible to mention equally great athletes with relatively small hearts. No prediction of athletic endurance is possible from heart size measurements alone. (32) (98) Dr. Tanner (95), of the Occupational Health Institute, Helsinki, Finland, who examined many great athletes, reported that the heart goes back to normal size after training is reduced or relinquished. No harmful effects are known. The average size of hearts of athletes does not differ very much from the average size of hearts of non-athletes. Heart size is determined by individual adaptations plus body size and inheritance. To illustrate how individualized a matter heart size is, Sulo Jousenlahti, great Finnish cross-country champion from 1941 to 1946 had one of the largest oxygen intake capacities of 55 former champion athletes examined by the writer in 1952, and he also had the largest heart size (23.82% above normal). But Taisto Maki, 41 years of age, who held the world's record for 10,000 meters in 1939 had a somewhat lower oxygen intake capacity to go with a somewhat smaller heart

size (12.57% above normal). But Joey Ray, the American runner with 960 races over a mile to his credit, had at 60 years of age one of the smallest hearts (-11.37%). He was still a good runner for his age, running 6:24 at 61 years of age. Jesse Owens had a much larger heart at 40 years of age than Ray but did not do as well on several endurance tests in our laboratory.

No systematic trends were found by Cureton between heart size and running "all-out" on a treadmill and many top athletes had hearts considerably smaller than average. (32) (35)

Important significance was found for several functional heart measurements, including (1) the Area of the Brachial Pulse Wave/Area of the Frontal Diastolic X-ray, (2) Area of the Brachial Pulse Wave/Heart Volume by Keys and Friedell Equation, (3) The Area of the Brachial Pulse Wave itself. (28) (34) (35) (98) Hunsicker (63a) found that the Barach Index was the best of the combination indices to predict treadmill running time but Gross Oxygen Intake was a bit better than the Barach Index.

The tracings with the heartometer pulse waves were shown by Massey (73b) to be equivalent to those which could be produced by the Johnson oscillometer (optical recorder). Recently, the main aspects of validity of the externally taken waves, with a cuff over the arm, have been confirmed by Henry (58) and by Massey, Hussman and Kehoe (74) in independent research at different stations to support our own work at Illinois in this area. (34)

In the studies of the Physical Fitness Research Laboratory, at the University of Illinois, are data showing the progressive build-up of oxygen intake capacity with training, shown by Michael and Cureton (75a), by Ganslen (54a) and by Heusner (61), confirming the trends of Robinson's earlier work. (89) Since the increased oxygen intake is associated with greater relative endurance, and with various other measures of cardiovascular condition as shown by Strydom (95b), there would seem to be no real doubt about physical training of the endurance type improving cardiovascular condition. This particular matter needs explanation because it is the common concept among many that a heart is improvable only by food or drug treatment. The treatment of disease is always, of course, in the hands of a physician but the improvement of circulation is mainly an exercise matter and is going on among thousands of normal people participating in progressive training experiments in which the heart makes important adjustment as do the blood vessels to the work imposed.

Different Approaches in Research Methodology

Methodology of research is of critical importance. Rather than "clinical diagnosis," the physical education evidence is in

terms of stamina records, associated and parallel oxygen intake data and brachial sphygmograms (pulse waves), changes in long accepted and published cardiovascular indices, reduction in pulse rate in the quiet state, reduction in pulse rate after and during standard exercise tests. The medical doctor does not accept such evidence (and we do not ask

him to) regarding the presence or absence of disease. But such evidence is good to indicate improved tolerance of exercise, the range of physiological adaptation, and can be used to predict performance in athletic exertion of certain types. It is these latter phases which interest the physical educators and coaches. In spite of working with these phases we will always need medical inspection of athletes and prompt care in case of illness.

The methods of research have already been reviewed just as they have been carried out in physical education and athletics. For those who are not familiar with them, a few references to the sources are given. Cureton's review as of Jan., 1951, presented to the medical faculty of the University of Illinois, "The Hearts of Athletes" (35), and a bit later to the research section of the American Association for Health, Physical Education and Recreation, March, 1951 (36); and much more fully in his books: Endurance of Young Men, 1945, (21) (22); Physical Fitness Appraisal and Guidance, 1947, (23) (24) (25); Physical Fitness of Champion Athletes, 1951, (31) (32) (33) (34). Reviews of these methods were presented to the American Physiological Society (29) and to meetings of physical education research groups (26) (27) (28) (30), and to the International Symposium of Sport Medicine, Physiology and Related Sciences, at Helsinki, Finland, July, 1952, and published in Sport Medicine, 1953 (38). No changes can be explained or finally understood unless the methods are comprehended. The purpose of this paper is not the methodology and it must be sufficient here only to briefly cite the background already in the literature.

Franklin Henry's papers (57) (58) are important, not for evidence of change in "already good" athletes but for the research methods outlined to show changes in peripheral resistance and other cardiovascular variables. His use of the Wezler and Böger equations for peripheral resistance and elastic rigidity, following Ralston's (87a) paper, have stimulated our own work. We have followed Wigger's simpler treatment of the same subject. (105)

TYPES OF EVIDENCE

Direct Evidence We do not consider that the evidence can yet be summed up by separate components because no one has carried out experiments that way, the data being in other forms, such as: the Schneider Index, the Barach Index, the Cureton CV Index, the McCurdy-Larson Organic Efficiency Index, etc.

Of the evidence which can be listed, there are the following types:

- (a) Most important case studies, followed carefully and measured relatively more completely, older men, young men and athletes, with the magnitude of the changes in that order, training done outside of service classes and under supervision. (17) (18) (37) (50) (52) (59) (61) (68) (73) (78) (87) (88) (91)

- (b) Unusual cardiovascular records, usually in athletes, resulting from several years of persistent endurance training: such as, Bob Richards, Roger Bannister, John Marshall, Roger Wint, (about 100 top men), contrasted with ordinary young men's standards. (26) (29) (33) (34) (35) (39) (45) (54)
- (c) Former champion athletes: such as, Joey Ray, Jesse Owens, Harold Abrahams, Eric Wilen, Paavo Nurmi, Henri Cochet, Emile Zatopek, Sulo Jousenlahti, Taisto Maki, Lauri Lehtinen, etc., some "still in training" and some "out of training." (41) (39) (45) (47)
- (d) Contrasting groups of athletes, such as, swimmers, track and field athletes, and gymnasts, all in training, compared with normal young men. (23) (26) (31) (40) (107)
- (e) Direct group experiments with young men tested at the beginning of training and again at the end of training to determine the changes. (1) (2) (9) (20) (21) (32) (33) (34) (58) (76) (89) (94) (96) (97) (106)
- (f) Direct group experiments with middle-aged men, usually with matched groups, sometimes with a dietary supplement like wheat germ or wheat germ oil, to determine cardiovascular changes over a period of several weeks of training. (6) (12) (13) (42) (43) (46) (60) (63) (99) (108) (110)
- (g) Correlational studies to determine associations and further bases for interpreting changes in the data. (10) (14) (22) (25) (32) (33) (34) (35) (40) (57) (67) (71) (74) (86) (90) (98) (109)
- (h) Prediction studies to determine the validity of predicting various types of performances from cardiovascular data. (21) (23) (24) (30) (31) (40) (74)

Associated Evidence
that Exercise Is Help-
ful to Cardiovascular
Condition

Dr. Ernst Jokl (64) has repeatedly emphasized that exercise itself, no matter how severe, cannot hurt the normal human heart, and presents studies of "Athletes' Indisposition" as explaining vasomotor weakness which is frequently mistaken for heart trouble. He further sustains the difference in logic and in practice of the medical point of view on diseased hearts and blood vessels as completely different from objective physiological phenomena, leading to different points of view. Credit should go to Dr. Percy M. Dawson (49) and Dr. Erling Asmussen (3) for anticipating some of the results of more modern experiments and establishing principles that endurance exercise helps to maintain blood flow while static contraction tends to obstruct it. Drs. Page and Corcoran, of Cleveland, and Dr.

Dudley White, of Boston, famous cardiologists, have publicly taken a position that regular exercise helps to ward off heart trouble and is good for coronary cases. (104) Dr. Snyder, physician to President Eisenhower, has ordered him to swim daily in the White House pool. (87) Drs. Dock and Carlson (51) reason that cholesterol can be utilized and removed from the blood vessels and heart by exercise. Pohndorf (87) found evidence that swimming 1000 yards a day for several months significantly reduced the cholesterol levels in the blood serum.

The series of studies by Petren (80) (81) (82), by Petren and Alsen (83), by Petren and Sylvan (85), and by Petren, Sjöstrand and Sylvan (84), on the value of hard exercise to increase the number of capillaries in the motor brain and in skeletal muscle should be quite convincing except to the sternest disbeliever. Krogh (69), in his book, *The Anatomy and Physiology of the Capillaries*, 1922, anticipated this evidence. Still, the evidence is on animals and not on man. No such direct evidence exists in physical education but the indirect evidence in terms of increased oxygen intake during a single long continued exercise as shown by DeSchrive (50) and Schnell (91); and also after several weeks of progressive training by Robinson (89), DeSchrive (50), and by Cureton (40) (41) (45) (46) indicates that physical training brings about important cardiovascular improvements, most likely due to increased capillarization.

WHAT TESTS INDICATE A STRONG HEART? GOOD CIRCULATION?

Characteristics of a Good Heart and Circulation

A good heart is one which will develop a large stroke for its volume or area as measured from the diastolic (flow of blood) X-ray; which shows no appreciable retardation or derangements of

the PQ-R interval of the ECG, or of the STT interval in a negative direction with respect to the isoelectric line, or inversion of the leads, I, II, IV or V after hard exercise. (33) Good circulation is characterized by relatively low diastolic blood pressure after exertion (47), relatively high oxygen intake under hard exertion, relatively low oxygen debt under hard exertion, and relatively high total (combined intake and debt) under hard exertion. The exertion tests are by far the best, but some value may be attached to the quiet tests. Of these, the brachial sphygmogram (pulse wave) area/area of the frontal diastolic heart X-ray is the best; the brachial sphygmogram is almost as good, correlating from 0.60 to 0.70 with all-out running time on the motor driven treadmill. (24) (28) (35) (98) Relatively large R and T precordial leads are considered good as found in superior athletes with unusual endurance: Roger Bannister had a T-wave of 25.3 mm., the average varsity athlete at the University of Illinois has an amplitude of approximately 14.0 mm., the average student about 9.5 mm., and very much out of condition types 5.0 mm. (8) (26) (28) (33) (35) (36) (41) (107)

It has been customary to use the pulse rate after exertion to measure circulatory fitness. The score of an individual will steadily improve with training because the pulse rate gets slower and slower, but the score as determined for various individuals cannot be used for prediction of running time. (22) The Progressive Pulse Ratio, at 12, 18, 24, 30 and 36 steps per minute, is better for people in relatively poor condition, using a 17-inch bench or stool. Good improvement has been shown for the average of the five ratios as the result of physical training over several weeks. (67) (68) (96) (97)

The brachial sphygmogram (pulse wave) as taken on the heartometer has been shown by Massey (74) to be equivalent to those waves obtained on the Johnson oscillometer with optical recording. Michael (75) demonstrated a good proportionality between the pulse waves as taken by Cureton's standardized technique and the stroke volume determined by the Grollman method (acetylene re-breathing). Various studies reviewed by Cureton (24) (25) (34) show the validity of this test to be better than other quiet tests but not as good as the oxygen intake test. Good improvements have been shown in the sphygmogram in several physical training experiments. (1) (2) (13) (17) (18) (24) (31) (37) (40) (42) (43) (46) (51) (54) (55) (59) (60) (63) (68) (78) (88) (91) (94) (97) (110) Weight lifting (106) and volleyball (108) made little change.

WHICH ACTIVITIES ARE MOST VALUABLE FOR CARDIOVASCULAR IMPROVEMENT?

The Value of Various (Persistently Per- formed) Activities to Improve Cardiovascu- lar Function

There are now many data available to show the systematic improvement of cardiovascular condition of individuals and groups who go through the endurance type of physical training programs for several months. It is impossible to review all of the studies here. Furthermore, this summary is confined to the available data on young men.

Best Gains

The best improvements have been shown in connection with hard endurance activities, such as:

- (a) swimming (repeating 100's, 220's and 440's in the scheme of interval training), (26) (31) (61) (78);
- (b) running repeated 220's and 440's in the scheme of interval training (1) (9) (18a) (26) (31) (45) (54a) (75a) (95a);
- (c) hard ergometer (resistance) bicycle endurance work (20a);
- (d) endurance or cross-country running (68) (89);
- (e) walking uphill on a treadmill for 30 minutes, 5 days per week (88);
- (f) varsity wrestling combined with running (97);
- (g) football combined with wind sprints (2) (96);

- (h) hard training calisthenics combined with endurance running and swimming, 5 times/wk. (23) (37) (40) (42) (43) (46) (55); and
- (i) endurance swimming (87).

Individually prescribed programs usually result in better gains than group programs. (37) (46) (110)

Moderate Gains

Mixed programs of training calisthenics with volleyball (63) (99), handball (13), badminton (94), or basketball (54); mixed programs of all-around muscular endurance (push-ups, pull-ups, sit-ups, side leg-raising, etc.) and some varied sports (21) (22) (60); a rhythmic endurance calisthenics training program done 5 times per week for one hour per day (61); moderate training calisthenics and swimming 3 times per week (17) (71a) (40) (42); rowing for 15-20 mins., 3 times/wk. on a rowing machine (52).

Insignificant Gains

Activities which tense the muscles, or which are of very short duration and of the near-maximum effort type: volleyball (108), weight training (12) (106), gymnastics and supplemental treatments like massage, hot baths and ultraviolet light exposures (1a) (68b). Games may be so social and casual that no cardiovascular improvements result. (71a) (108)

AGE AND LIMITATIONS

Age and Cardiovascular Fitness

Age has only a very moderate effect upon cardiovascular condition. Former athletes who have kept up a physical training program throughout

the middle-aged years of life show relatively high oxygen intake capacity and higher than average cardiovascular functional capacity, but similar former athletic champions who have given up exercise and adopted a sedentary life revert to the average or lower. (41)

Limitations

Certain limitations to obtaining "proof" should be understood. If men run cross-country all

summer, then are tested in the fall, they will test relatively high at the start of the season. (31) (58) (58a) This is why two varsity basketball teams (31) (54) and several swimming teams (72a) (67a) and one wrestling team (99a) tested by Cureton and his associates show high scores at the beginning of the season and then appear to deteriorate as the season goes along. The competitive mental effort induces "competitive fatigue," even "staleness" reflected in the cardiovascular scores (95) (42) unless rest, morale and vitaminization and mineral supplementation of food is of the best quality (such as adding vitamin B-complex, wheat germ, and wheat germ oil to the diet).

SUMMARY

As a result of continual experimentation over a period of some thirty years of measuring the effects of moderate physical training and associated hygiene advice, certain basic principles have evolved out of this work which come as the result of observing and measuring the effects of various programs on middle-aged men. It can be said that exercise is decidedly beneficial, and, in fact, is so beneficial that in the search for ways and means to counteract the mental and emotional stresses of business and urban life, exercise of the right kind is man's best insurance. The following types of activities are valuable to improve cardiovascular condition, assuming that nutrition is adequate and germinal infection is avoided:

I. Promotion of blood flow by means of systematic rhythmic endurance exercise over several months strengthens the heart, blood vessels and permits higher scores on standardized cardiovascular tests; and as an associated result, endurance in physical activities is improved. It is logical that if many new capillaries are opened up, the blood pressures (both systolic and diastolic) will lower because the ejected blood flow will have less peripheral resistance and will circulate better. It is also logical that blood stasis from long inactivity causes an appreciable number of capillaries to close up. So far as warm-up evidence is concerned, at least 13 minutes of continuous exercise are required for body heat to reach a plateau level accompanied by perspiration and improved efficiency. (18b) (50) Such body heat is thought to be necessary to produce appreciable capillary dilatation.

II. Swimming in cool water, and cool showers and baths promotes arterial circulation, high metabolic energy and helps the venous circulation. Swimming in cool water also reduces neuromuscular hypertension. This also strengthens the heart. During removal of air pressure in a decompression chamber, the circulation stagnates in the peripheral vessels, much as if the venous tone is greatly lowered; the Brachial pulse waves decrease and the output of the heart is greatly lessened as anoxia develops. Contrary to this, immersion in water and the rhythmic swimming movements with relatively fast contraction and long relative relaxation time, causes a much larger blood flow. The water pressure undoubtedly helps the blood flow just as an elastic stocking helps weak veins. The heart is strengthened on a strong blood flow rather than a weak flow, and the duration of the exertion is a real factor in the training. All endurance athletes, such as, Zatopec, Nurmi and Kuts have demonstrated this by increasing the laps of "interval training" greatly beyond the customary number to develop into the world's greatest endurance runners.

III. Rhythmic endurance exercise, performed for reasonably long periods at a moderate pace, lowers the pulse rate, increases the vagus tone, lowers the blood pressures, and probably reduces the cholesterol in the blood and neutralizes excessive adrenalin in the blood due to mental and emotional stress. It is possible that enough blood lactate produced by exercise may offset the alkaline adrenalin, producing a type of relaxation well known to athletes.

IV. Ultraviolet light, taken three times per week with full body exposure and in moderate doses, mildly reduces the blood pressures, lowers the pulse rate and improves the nutritive state of the nerves and blood vessels, and as a result, the pulse waves enlarge and the cardiovascular scores go up.

V. Wheat germ, wheat germ oil, whole grains, natural fruits and vegetables, skimmed milk and vitamin B complex should make a larger part of the diet with some reduction of animal fats, fried foods, rich starchy foods and white sugar. Soybeans and carrots, green beans, and whole grain cereals are indicated in considerable quantity, as is liver, baked fish and all-around vitamin supplementation in periods of physical stress (training).

VI. Emotionally satisfying activity—sex, hobbies, recreations, etc., are needed in reasonable proportion to the amount of routine and monotonous work for effective levels of mental and physical health, and to reduce anxiety which produces fatigue of the cardiovascular system.

VII. Every year for several months a moderate and progressive endurance type of conditioning program of physical exercise is needed to maintain above average levels of cardiovascular fitness, as well as strength, agility, balance, flexibility, power and endurance. Such a program will help to ensure a desirable margin of health and physical efficiency, and is now considered "protective" in nature.

The trends from a number of studies show that: (1) exercises of an endurance nature are primarily the type which cause a persistent lowering of the quiet sitting blood pressures, slowing of the pulse rate, increase in gross oxygen intake during exercise, increase of amplitude (also area and diastolic wave) of the brachial sphygmogram and increase in amplitude of the T_v-lead of the electrocardiogram. Such changes are generally considered good evidence for the improvement of the cardiovascular condition. (2) Data taken during exercise, such as oxygen intake rate or total oxygen utilization capacity (gross oxygen intake + net oxygen debt) are indicative of the

proportionate ability of the circulatory mechanisms to adjust to hard work. With good adjustment there is enough circulation through the heart and lungs to supply a larger portion of the demand of the body tissues for oxygen. In poor adjustment, there is poor circulation and poor oxygen intake. The blood cannot circulate fast enough through the muscles and through the capillary beds of the lungs to prevent quick fatigue. (3) Several standard exercise tests, or progressive exercise tests, serve to partially evaluate the same functional circulatory capacity but none are considered as important as the measurement of the oxygen intake capacity. But with inability to obtain oxygen intake measurements conveniently, dependence is put upon brachial sphygmograms, post-exercise pulse rates and blood pressures, and pulse rate recovery tests (5 Step Test or Progressive Pulse Ratio Test) as substitutes for oxygen intake itself. Such substitutes are validated against the oxygen intake data or against the time of performance.

Post-exercise blood pressures, rate of oxygen debt and recovery tests of various kinds are also used to indicate circulatory adjustment but the time of a maximal endurance effort is, in itself, a much better indication of the adjustments which go on during the effort. What happens to circulation after the effort may be important but not as important as the actual adjustment under effort itself.

Because of the "pumping" action of the limbs, the vigorous use of the legs is very important in forcing enough blood through the systemic circulation to condition the heart and blood vessels.

VIII. Outdoor life, intermittently with indoor, and for at least one month each year, is essential to fitness. This might include: Weekends of camping, swimming, canoeing, sailing, fishing, and hiking.

IX. Playing a different physical (sport) game for fun each season, one to three times per week, is one of the principal ways to gain physical and psychological refreshment. For instance, Fall - tennis, hiking, cycling; Winter - bowling, skiing; Spring - golf, hiking, cycling; Summer - golf, baseball, swimming, boating, tennis, cycling.

But the casual playing of games is not considered to be an effective means of increasing cardiovascular fitness above average levels unless special attention is given to pre-season and supplementary programs of the endurance type.

X. Abstinence from excessive use of strong alcoholic drinks, smoking and overeating will permit higher levels of fitness in the cardiovascular aspects of fitness. Starvation and

"dieting" on diets inadequate in proteins, vitamins, minerals and catalytic enzymes will also cause loss of morale and vigorous feeling tone.

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THE PROBLEM OF CARDIOVASCULAR FITNESS IN CLINICAL PHYSIOLOGY

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Clinical interest in cardiological problems of athletics was stimulated by the description of several cases of outstanding athletes afflicted with valvular heart disease.^{1,2} The significance of this discovery should be considered in the light of the fact that physicians widely assume that there exists a clear distinction between the effects on patients with valvular heart disease of light and severe physical activities respectively. Moreover, in most instances of this kind the medical practitioner believes not only that severe physical activities would exert a harmful effect, but also that the patient would be incapable of carrying them out. The view that "heart disease" generally disqualified from exercise in any form is today applied chiefly in dealing with patients who are found to have diastolic murmurs, although many instances are still encountered in which physical activities are severely curtailed on medical advice because of the presence even of uncomplicated systolic murmurs. With regard to the latter, such an attitude is no longer justifiable in view of ample clinical evidence -- first presented by Sir James Mackenzie -- proving the benign nature of such murmurs. In most instances they do not indicate organic valvular heart disease. An impressive example, communicated in 1933, is that of a woman middle distance runner who had previously been warned not to participate in athletic events because of the presence of an uncomplicated systolic murmur. Her disregard of this advice, enabled her to win the half-mile race at the 1928 Olympic Games. I examined her 25 years later and found her in the best of health.

An attitude similar to that now generally accepted concerning uncomplicated systolic murmurs seems to be tenable also with regard to uncomplicated valvular disease of the heart presenting murmurs diastolic in time when these are due to aortic regurgitation and mitral stenosis or to aortic regurgitation alone, of rheumatic origin. Much evidence is available to justify this statement. That the presence of aortic regurgitation alone need not interfere with strenuous forms of exercise was shown by the observation in 1936 of a young mine laborer who had this condition, of syphilitic origin³. In 1940 a case of aortic regurgitation and mitral stenosis in a marathon runner was described.⁴

Until recently it was generally thought that mitral disease, unless combined with aortic regurgitation, invariably affected physical efficiency, presumably as a result of hemodynamic disturbances believed to be peculiar to this valvular lesion, namely the defective filling of the left ventricle and the consequent venous congestion. Recent experiences with athletes, however, render it necessary to revise this view. Mitral, like

aortic disease, seems to interfere with a person's physical efficiency only if the mechanical disability produced by the valvular defect is very extensive, or if it is enhanced by a poor myocardium, or if the underlying pathogenetic process is still active. A similar clinical attitude seems to be justified with regard to aortic stenosis of valvular origin. Apparently the same statement applies with regard to the rare condition of congenital sub-aortic stenosis which had been present in a case of my own observation in a physically active person.⁵ It should be noted that the issue so far considered is solely that of functional efficiency in the presence of cardio-vascular disease.

Pathological Studies

Pathological analyses of the mechanisms involved in acute fatal non-traumatic collapse associated with physical exertion yielded further information. A report published in 1940 dealt with the results of 61 autopsies conducted on subjects who had died during exercise.⁶ To this material were subsequently added two further cases, viz. that concerning a famous football player who collapsed and succumbed after a game,⁷ and that of a boy of ten years of age who suffered the same fate after a boxing match.⁸ All these studies revealed that collapse associated with physical exertion is almost invariably due to circulatory disease of long standing. In none of the cases under reference had the subject been free of serious cardiovascular disease. The following conditions arranged in order of frequency were found at autopsy:

1. Coronary artery disease.
2. Acute coronary occlusion.
3. Degenerative disease of heart muscle.
4. Ruptured aneurysm of aorta.
5. Chronic inflammatory disease of heart muscle.
6. Ruptured aneurysm of cerebral arteries, usually congenital.
7. Rupture of heart.
8. Developmental abnormalities of the heart.
9. Rupture of congenitally diseased aorta.
10. Developmental hypoplasia of entire arterial system.

One of the most significant results revealed in these pathological studies was that for a variety of reasons the presence of cardiovascular illness did not prevent the subjects thus affected from maintaining a normal or even extraordinarily high standard of physical efficiency. During the past ten years or so, several of the conditions enumerated above have become amenable to effective and lasting therapeutic management, more particularly to cardiac surgery. We have recently treated patients who could be successfully operated for an open ductus arteriosus, for tetralogy of Fallot, for coarctation of the descending aorta and for the correction of an almost complete pathological closure of the mitral valve. All of them recovered a highly satisfactory standard of health as well as of physical efficiency.

Heart Strain and Exercise

As a result of the introduction into cardiological research of modern diagnostic methods, more especially of radiology, kymography, electrocardiography, ballistocardiography, statistics, as well as of better co-ordination between physiological, clinical and pathological studies, the "heart strain through exercise" theory in its previous formulation has become untenable. The evidence against it is overwhelming. Electrocardiographic studies of athletes after the most exhaustive physical performances, such as marathon running, have failed to show any circulatory reactions of a pathological nature.¹⁰ Several relevant statistical and actuarial investigations¹¹ prove that the length of life of men who in their youth excelled in athletics is most satisfactory. X-ray studies such as those conducted at the Amsterdam Olympic Games in 1928 have destroyed the fallacious belief that outstanding athletes develop pathologically enlarged hearts.¹² Intensive research into the problem of cardiac enlargement has revealed that barring of extreme hypertrophy and dilatation of obvious pathological origins, clinical judgment on the quality of a heart may not be based on an assessment of its size alone, and that factors such as the ratio between myocardial fibre and capillary density are at times the most important diagnostic and functional determinators.¹³

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AN INVESTIGATION OF THE EFFECTS OF PHYSICAL TRAINING UPON CARDIOVASCULAR COMPONENTS IN THE MALE ADULT*

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Purpose To determine the role of physical training in the important problem of reducing peripheral resistance and hypertension.

Method An experimental case study approach using six subjects was employed. Four subjects with varying levels of physical condition were given two batteries of tests, one designed to evaluate general physical condition and the other designed to measure peripheral resistance, before and after adopting a five month training program. Two other subjects were tested with the same test batteries approximately each 2-1/2 months; one subject, starting at a high level of physical condition detrained for the first 2-1/2 months and trained for the last 2-1/2 months. The other subject, beginning at a high level of physical condition, acted as a control by continuing with training.

The formula: $W = \frac{Pm}{Vs \cdot R}$ which has been used by Ralston and

others to compute peripheral resistance, was used to determine both quiet and post exercise peripheral resistance in these subjects, Pm being the average of the diastolic and systolic blood pressures, Vs the stroke volume in c.c. and R. the heart rate in seconds. The Grollman method with corrections (by Chapman and Keys) for the solubility of acetylene in blood and for the effects of forced rebreathing on the arteric-oxygen difference was used to determine stroke volume. The effect of a systematic error in the cardiac output determinations of some subjects, apparently caused by the forced rebreathing procedure, was minimized by using only the first trials of the subject for each day. A test and retest for first trials on six subjects in the quiet sitting state yielded an R of $+ .83 \pm .184$; and a test and retest on five subjects in the post exercise state yielded an R of $+ .80 \pm .187$. The statistical significance was then evaluated by the use of Fisher's tables by comparing the change in peripheral resistance with the standard error of measurement of differences between tests and retests.

* Based upon the author's Ph.D. thesis, University of Illinois, Physical Fitness Research Laboratory, 1955 (sponsor, T. K. Cureton).

Results

The peripheral resistance was reduced in all subjects who carried out the five month training program (which was not the same for all individuals). The following table summarizes the statistical significance of changes; (significance tested at the five percent level of confidence).

Subject	Sign. Ratio T ₁ - T ₂	Sign. Ratio T ₂ - T ₃	Significant
L. T. (Hypertensive)	1.398	--	yes
S. C.	.598	--	no
J. W.	1.025	--	no
R. M.	.568	.582	no, no
B. O. (Detrained)	1.536	1.775	yes, yes
E. R. (Control)	.161	.038	no, no

Peripheral resistance reduction resulted primarily from the reduction of mean blood pressure, increase in cardiac output or a combination of these. Mean blood pressure shifts were seen to be functions of either systolic or diastolic shifts, rather than of diastolic shifts alone. The peripheral resistance changes in the subject who detrained resulted almost completely from shifts in the cardiac output. Increased cardiac output during detraining in his case was interpreted as part of a "lag" which Michaels describes in a study on four subjects.

The immediate reduction of peripheral resistance from the quiet sitting to the post exercise state indicated an autonomic response to exercise. The motor performance, physique and neuromuscular test batteries were examined for reflection of autonomic nervous changes which might accompany the peripheral resistance change. It was found that visual reaction time, standing and exercise pulse rates, R wave of the ECG, brachial pulse wave, systolic and diastolic amplitudes and basal metabolic rate shifted almost always in the same way when peripheral resistance was reduced, and these were taken to be indicators of greater sympathetic activity.

Conclusions

1. Peripheral resistance either in the quiet sitting or post exercise states, or both, is reduced during prolonged physical training. This occurred in four out of four subjects who trained for five months, but not in the exercise control subject. It was also reduced in the one subject who detrained for 2-1/2 months.

2. The shift in components of the peripheral resistance formula when reduction occurs has a variable pattern, and may result from a change in one or a combination of the components of mean blood pressure, stroke volume or heart rate.

3. The immediate effect of exercise in reducing peripheral resistance indicates action of the autonomic nervous system which is accepted as the cause of vasodilatation.

4. During five months of training, the reduction of peripheral resistance probably indicates a persistent shift toward greater sympathetic nervous activity.

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CIRCULATORY-RESPIRATORY RESPONSE TO MODERATE (SUB-MAXIMAL) EXERCISE

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This report is a partial review of the literature dealing with circulatory-respiratory response to moderate (submaximal) exercise. The studies cited used adult males as subjects, mostly of college age. With a few exceptions, the references are post-World War II.

The studies fall into three categories: (1) Response of circulatory-respiratory function to moderate exercise; (2) relationship between moderate exercise responses and performance in more strenuous activity; and (3) effect of sports or physical education upon moderate exercise response.

Responses of Circulatory-Respiratory Function to Moderate Exercise

As the result of their observations on blood-sugar concentration in moderate exercise, Dill, et al. conclude that blood sugar changes very little (7). This, together with observations on the constancy of lactic acid lead them to infer that during moderate exercise, the supply of oxygen is wholly adequate, adrenalin secretion is little increased, and little muscle glycogen is used.

Dill (5) points out that moderate exercise is paid for by the oxidation of carbohydrate and fat and does not involve the accumulation of lactic acid. He therefore sets the upper limit to what can be classified as moderate exercise. Exercise that involves the accumulation of lactic acid would not be called moderate.

Dill (6) found that moderate exercise such as the activity of the factory worker causes a relatively small increase in oxygen consumption and only slightly elevates the heart rate, while changes in the properties of the blood are for the most part negligible.

Energy reserves are not called up, as fuel is continuously available through the normal digestive processes.

Dill points out that in moderate work, little energy is transformed and that what fatigue is produced is hardly enough to be of direct interest to the physiologist.

Thomas and Keys (16) found mild exercise to be more effective than bed rest or diathermy in hastening the disappearance of blood lactates during recovery.

Erickson, et al. (9) found that several months of training, with prolonged periods of treadmill walking resulted in only slightly decreased energy metabolism. The subjects were college students.

Elbel (8) found no significant correlations between pre-exercise pulse rate and pulse increase due to the exercise. He studied college men using two mild exercises consisting of stepping up and down on a 16 inch bench at a rate of 18 steps per minute for a period of 30 seconds and a period of 60 seconds.

Pike (15) found that the measurement of heart rate holds far greater value for use in a short exercise test than does any other circulatory factor observed. He found further that the first few minutes after exercise are most helpful in identifying levels of fitness.

Relationship Between Moderate Exercise Responses and Performance in More Strenuous Activities

Using college men as subjects, Henry (11) found that a steady-pace in running has greater physiological economy than does all-out running. The inefficiency of faster speeds is considered to be the result of a greater component of anaerobic metabolism; while at slower speeds a greater part of the cost is managed by pay-as-you-go metabolism.

Using college men, Thompson (17) found that diastole rose in isometric grip squeezing, but did not rise in the more strenuous isotonic exercise of riding a bicycle ergometer. This study demonstrated that some types of moderate exercise can elicit a greater circulatory response than exercise having a greater oxygen requirement.

When college men walked the treadmill over a long training period, the variability in work metabolism among the men was greater for mild walking rates than for higher work loads (9).

Miller and Elbel (12) found that when college men performed step-up exercise on a 16 inch bench at moderate rates, their pulse rate immediately after exercise rose in proportion to the step cadence. Cadences were 18, 24, 30, 36, and 42 steps per minute, and the duration of exercise was for one minute for each cadence. Only the first two rates can be considered moderate. At these moderate rates, the pulse rate taken one minute after exercise was on the average significantly lower than pre-exercise rate.

Medical school freshmen demonstrated a lack of correlation between a response to mild exercise and physical fitness (4). They performed the breathholding after a one-minute step test. The tests of physical fitness were the 14-item and the 18-item University of Illinois Motor Fitness Tests.

The breathholding response to mild exercise also failed to show a significant correlation with strenuous exercise. The mile run and the five minute Brouha Step Test were the strenuous exercises studied.

When a group of navy men were given a battery of test items taken from cardiovascular and fitness tests, one factor isolated through statistical analysis was pulse response to mild exercise (2). This factor was found to be unrelated to pulse rates taken after exhaustive endurance runs, thus indicating that moderate exercise pulse rates provide no basis for predicting the pulse response to greater loads.

A group of college men performed breathholding tests following exercises of increasing duration (13). First order interactions in an analysis of variance reveals that the subjects who performed breathholding best at one duration did not necessarily perform best at another exercise duration. This suggests that breathholding at different exercise durations are not perfectly correlated.

The study also showed that increasing the duration of moderate exercise has progressively less effect on breathholding ability.

The oxygen transport efficiency in college men was compared for two levels of exercise, slow movement on a bicycle ergometer and fast movement (10). Both exercises may be considered within the limits of moderate exercise. The study showed that oxygen transport is not more efficient in the fast-movement exercise as compared with the slow. The author suggests that the change in speed of movement of the limbs in bicycling is not within a range that produces any improvement in circulation through the veno-massaging action of the working muscles.

A group of college varsity oarsmen supplied data on the Recovery Index of the Harvard Step Test, maximum pulse response and post-exercise blood lactate for a five minute run on a treadmill (14). A significant relationship was found between the response to the Recovery Index and the response to both the other two measures. The author, Montoye, calls the Recovery Index a response to moderate exercise; which implies that response to moderate exercise reflects response to more severe intensities of physical activity. This interpretation is based on the classification of the Harvard Test as moderate and the run as more strenuous (5 minutes at 7 miles per hour at 8.6% grade).

The data also revealed that post-exercise pulse response to moderate exercise is sensitive to an exercise training program of 12 weeks duration.

Buckley (1) found breathholding after a mile exercise to be significantly related to the oxygen used in an all-out treadmill run. The exercise was stepping for one minute on a 16 inch bench, after which the subject held his breath against 20 mm. of mercury using a flarimeter.

Effect of Sports or Physical Education Upon Moderate Exercise Response

After presenting a review of studies dealing with the effects of physical education activities and athletics on cardiovascular fitness, Cureton (3) says in summary that activities such as volleyball, rhythmic exercises, and swimming help to improve the cardiovascular system. He states, however, that volleyball and weight training (which are submaximal exercises) produce less change than other types of activities (meaning more strenuous).

To illustrate the types of studies reported by Cureton, two references are mentioned here. For a complete listing, see the Cureton (3) reference.

A program of volleyball, with some calisthenic work, was found to lower the average pulse ratio, lower the angle of the pulse ratio curve

and slightly lower the angle of the "break" (18). These changes are considered to be improvements in the cardiovascular system. This study was conducted with a group of adult males, ages 26 to 60.

A program of volleyball failed to raise cardiovascular fitness significantly as measured by such variables as obliquity angle, heart rate, rest to work ratio, and diastolic surge (19).

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EFFECTS OF PHYSICAL EXERCISE ON THE CARDIO- VASCULAR RECOVERY FROM HARD EXERCISE

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It is the purpose of this paper to review the published and unpublished studies relative to the effects of physical exercise programs on the cardiovascular recovery from hard exercise with the subjects being of college age.

The studies relating to this phase of research report the measurements of lactic acid, pulse rates, blood pressures and oxygen intake. In this report, hard exercise is defined as any exercise of at least 1 minute's duration which causes an oxygen debt or requires at least 3 minutes for circulatory recovery.

Studies Relating to the O₂ Intake and Debt

Ganslen (11) reported the results of a training program on the oxygen intake and oxygen debt during and following an exhaustion ride on a bicycle ergometer. Significant differences were found in the higher net oxygen debt measured during recovery after 6 months of training. Since the recovery oxygen intake did not change as a result of training, the indication is that an increased tolerance for debt results from training and not a more efficient recovery mechanism. A rapidity of adjustment of the circulation to the muscle needs seemed more important than maximum circulatory capacity in exhaustive work tasks.

With respect to O₂ intake, Robinson (22) reported that training of men in running increased their O₂ consumption and blood lactate recovery. The blood lactate increase after work was interpreted to mean a better mechanism for contracting an O₂ debt. Five minutes after exhausting work, lactic acid had become uniformly distributed between tissues and blood as a result of training.

Using the lactic acid as the indication of debt, similar results were found by Knehr (15), who reported a study where track work 3 times per week for six months was followed on 14 students at Harvard. The results showed that for a given work time training increased the O₂ debt as if better anaerobic mechanisms were used for energy. An increased tolerance for lactic acid was also indicated by the recovery data. Following maximal work, training resulted in an increase of 5 - 6 per cent in the O₂ debt and an increased tolerance for lactate. This was judged by the amount repaid in the first 15 minutes of recovery. There

was a ratio of around 22.5 mgm. per cent lactate per liter of O_2 debt after conditioning which represented a 10 per cent increase due to training.

Crescitelli (6) reviewed the literature and reported the results of studies done by several investigators before 1943. The general agreement was that training results in lower blood lactates in response to exhausting exercise. The findings supported the previous suggestions that the recovery lactate figures reflect the fitness level. The unfit subject had higher lactate responses reflected by the recovery curves when the submaximals work of 2 minutes stepping on an 18 inch bench at 40 steps per minute was done. The 15 minute treadmill walk at 100 meters per minute with a 15% grade resulted in lower recovery blood lactate and urine lactate for the athlete. The urine lactate following a standard exercise was found to reflect the fitness as well as blood lactate.

Studies Relating to Pulse Rate Changes

Pulse rate measurements following exercise indicate faster recovery as well as lower rates due to conditioning. Timmerman (24) demonstrated that a season of vigorous six man football resulted in progressive pulse ratio changes for 15 - 19 year olds. The recovery pulse rates at higher rates of work, 36 steps per minute, were lower after the training program.

Pulse rate recovery changes were also demonstrated by Tomaras (25), Harrison (12) and Vincatore (27). Tomaras (25) measured college wrestlers before and after 4 months of intensive training and found that the training resulted in a more rapid pulse rate recuperation following a 5 minute step test.

Vincatore (27) found that the recovery pulse rates taken from the progressive pulse ratio test were found lowered in adult men following physical training. In this study, the changes in the pulse ratios was not too great due possibly to the light type of conditioning programs.

Harrison (12) studied adults who participated in a swimming conditioning program and found that the recovery pulse rates on a 5 minute step test decreased an average of 10% in standard scores while the recovery pulse rates on the progressive pulse ratio test decreased similarly.

Montoye (18) presented data demonstrating that training of athletes results in lower recovery pulse rates reflecting the blood lactate following submaximal exercise. He pointed out that post exercise pulse rates were also lowered with training in studies by Gallagher and Brouha (9) (10) and Brouha and Savage (3). It was suggested that the recovery pulse reflects adjustments to and recovery from exercise closely related to blood lactate.

Two studies recently completed at Santa Barbara College demonstrate the effects of training on recovery pulse rate. (17) (16) Nine

highly trained athletes were compared with average college students after stepping 1 minute at 30 steps per minute on a 17 inch bench. The step test was given 3 times in succession to show the accumulation of fatigue. With the conditioned men the pulse rates returned to normal within 2 minutes on both the first and third test. The pulse rates of the non-conditioned men did not return to normal resting until after 7 minutes of recovery.

In the second study, two nationally ranked distance runners were tested before and following a 1 minute step test at 36 steps per minute during a 6 month training program. The pulse rates returned to the resting level within 1 minute after 8 weeks of training and following 3 months of de-training 2 - 3 minutes were required for a recovery.

Knehr (15) pointed out that the heart time rate recovery curve following maximal work was not altered following training. The curves followed the exponential functions of: $y = ae^{-bx} + C$, where y = heart rate and X = time elapsed.

In exhausting work the capacity for aerobic energy transformation is increased with training. This probably depends on an increased cardiac output and better conditions for gas exchange in the muscle cells.

The decline of pulse rates after performance is useful to differentiate fitness only when of fixed duration and when intensity is sub-maximal.

Studies Relating to Blood Pressure Changes

Michael (16) followed two distance runners during a conditioning program and during de-training and tested them on a 1 minute step test at 36 steps per minute. The blood pressures returned to resting level within 3 minutes when the runners were conditioned and in 4 - 5 minutes when the runners had not been running for 3 months. The systolic blood pressure always decreased following exercise while the diastolic pressure increased following a drop during exercise. There was no significant change in the size of blood pressure changes made during the exercise. When conditioned athletes and non-conditioned students were compared on a 1 minute step test at 30 steps per minute (17), the recovery blood pressure curves were quite different. The systolic blood pressure of the conditioned men returned to normal in 4 minutes while those of the non-conditioned took 8 minutes to recover.

Blood pressure recovery curves were also studied by Rochelle (23) who showed that venous blood pressures of fit students returned to normal in 7 minutes following a bicycle exercise while less fit students returned in 12 minutes. This significant difference indicates a cardiovascular adjustment of the blood flow reflecting changes in the vascular bed or in the recovery of the systolic pressure from the exercise.

SUMMARY

Physical conditioning of college age students is reflected in the recovery of the cardiovascular system following hard exercise.

Related studies have been reviewed and the indication is that following a standard exercise the pulse rate recovery curve differentiates the fitness of individuals as well as any tests of stress. Blood pressure data is not as extensively studied but faster recovery with the better fit is indicated.

Submaximal tests appear more useful to test fitness than all out exhaustive tests as far as recovery curves are concerned. This apparently is due to the influence of the will in all-out exercise which adds a factor that is difficult to control. If the time factor involved in running all-out could be corrected, the all-out tests might be of more value. All-out exercise also involves the possibility of muscular fatigue affecting the test thus masking the true circulatory picture.

Blood lactate and urine lactate tests also reflect the fitness of individuals when the recovery curves are followed. The lactate tests follow the O_2 intake and debt curves of exercise indicating a greater tolerance for O_2 debt with the conditioned person. With the submaximal work, less lactate is seen in the conditioned person and faster recovery occurs.

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MEETING THE NEEDS FOR FITNESS THROUGH THE SCHOOL PROGRAMS OF HEALTH, PHYSICAL EDUCATION, AND RECREATION

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It is known that physical fitness, sports understanding, sports skills and sportsmanship can be and have been taught.

Meager time allotments to class instruction throughout the country, as a rule, negate thorough or adequate development of these objectives. Supplementary experiences in the laboratory out-of-class programs such as: corecreation, intramurals, adapted-restricted-remedial activities, and interschool athletics are necessary.

The organismic concept, substantiated by the sciences of physiology and psychology alike, indicates the need for broader methods in teaching greater variety in activities, and these supplementary programs for achieving total fitness.

Previous studies of fitness of American youth have repeatedly shown the lack of vigor in the average youth. On the other hand studies by several reputable physiologists have revealed that stepped-up programs for strength and endurance have been beneficial not detrimental to American youth. Fitness not maintained regresses. Hence the need for leisure participation programs. Physical fitness is only one objective. Sports understandings are essential to spectator appreciation as well as to participant comprehension. Sportsmanship needs to be imparted again for sound spectator behavior and appreciation as well as for participation according to social standards.

Fitness is not a bank account, it must be earned daily. Seeing sports is not enough. We must be in sports. We will not be in sports if we lack the skills. The meager instruction in a few popular team games (for the masses, that is) must be reinforced by leisure participation in activities voluntarily chosen from a wide variety of possibilities.

These supplementary programs will not organize themselves, trained leaders must organize them according to sound principles. Such organization will not happen unless there are adequate facilities.

There has been indicated a need for more than service programs in physical education. We need adapted-restricted-remedial, co-recreation, intramural, and interscholastic programs in addition to an all-round vigorous physical education instructional class program.

In summary the following types of programs are suggested to further total fitness:

Health Service:	Health appraisal; Health counseling; Prevention and control of disease. Emergency care.
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- Health Education: Experience in health and safety which will influence the attainment of desirable knowledges, attitudes, and conduct.
- Healthful Environment: Safe and healthful environment for living and working; Healthful working and activity schedules; Good emotional and social climate for individuals and groups.
- Physical Education: Core Program - A wide variety of activities which will influence the development of organic power, physical fitness, skills, desirable attitudes, and desirable knowledges and appreciations of activities.
- Physical Education: Adapted and Restricted Program - A wide variety of activities which will meet the objectives of the core program but which are adapted to meet the specific needs of the physical conditions of the individuals.
- Physical Education: Co-recreation - A variety of wholesome leisure activities in which both boys and girls may participate.
- Physical Education: Intramural Program - A variety of activities in which greater skills are desired than is possible to obtain in the Core program. A program which will also offer development of desirable knowledge, attitudes and appreciations on the part of players and spectators.
- Physical Education: Interscholastic Athletic Program - A variety of activities in which the highly skilled individual may participate. A program which will offer opportunities for development of desirable knowledges, attitudes and appreciations on the part of players and spectators.
- Outdoor Education: A variety of activities which will influence the development of desirable interests and skills for living outdoors.
- Recreation Education: A variety of activities which will influence the development of desirable recreational interests and skills with carry-over value for leisure time.

The control objectives, or major outcomes, for teaching badminton for senior high school boys (Grades X, XI, and XII) are set forth in terms of condition, skills, knowledges, and attitudes, for the following activities:

BADMINTON

Control Objectives

I. Condition

- A. Physiologic capacity to play at top performance throughout several badminton games of strenuous competitive nature

The condition involves:

1. strength and flexibility of wrist
2. running, quick stop and start strides
3. strength, balance, agility to swiftly cover entire court and to make powerful strokes with perfect body control

II. Skills

- A. Skill of grip of the racket and body stance

1. fingers and thumb position
2. flexible wrist position
3. basic stance position

- B. Skill in Service

1. stance
2. out of hand and/or toss service
3. short serve
4. long serve

- C. Skill in Forehand Stroke

1. stance
2. movement of racket

- D. Skill in Backhand Stroke

1. stance
2. movement of racket

- E. Skill in Overhead Stroke

1. stance
2. movement of racket

- F. Skill in Net Strokes

1. "lift" stroke: stance and racket movement
2. quick smash or drop stroke: stance and racket movement

- G. Skill in footwork

1. "on guard" stance
2. pivot
3. movements away from the net
4. movements toward the net
5. return to original position

H. Skill in Court Coverage

1. Position play for singles game
2. Position play for doubles game

III. Knowledges

- A. Knowledge of the History of Badminton
- B. Knowledge of the rules
- C. Knowledge of selection and care of equipment
- D. Knowledge of game terminology
- E. Knowledge of bird flights and returns
- F. Knowledge of game and stroke strategy
- G. Knowledge of the etiquette of Badminton
- H. Knowledge of location of local facilities where Badminton may be played

IV. Attitudes

1. Readiness to play in a sportsmanlike manner at all times
2. Readiness to help others gain skill and enjoyment in playing Badminton
3. Readiness to seek out opportunities to play Badminton as a regular form of recreation

PLAYING BASKETBALL

Control Objectives

I. Condition

1. Physiologic capacity to play at top performance for the full game of 48 minutes and to play in the overtime periods if necessary, without undue fatigue.

The condition involves:

- a. Running, much of it at sprint speed, during a major share of the game.
- b. Strength in either arm to pass and shoot the ball frequently and accurately during the game.
- c. Strength, balance, and agility to avoid contact with another player; or, if contact is made, to maintain position, avoid injury, and protect the other player.

- d. Strength and flexibility of ankles and knees to protect them from the shocks that come during running, jumping, dodging, pivoting, and changing direction; and to protect them from possible injury in any situation on the field of play.

II. Skills

1. Skill in passing the ball.
 - a. Chest pass.
 - b. Bounce pass.
 - c. Baseball pass.
 - d. Hook pass.
 - e. Two-hand underhand pass.
 - f. One-hand underhand pass.
 - g. Two-hand overhead pass.
 - h. Two-hand shoulder pass.
2. Skill in pass receiving.
 - a. Stationary position.
 - b. Running.
3. Skill in basket shooting.
 - a. One-hand lay up shot.
 - b. One-hand set shot.
 - c. Two-hand chest shot.
 - d. Pivot and hook shot.
 - e. One-hand overhead shot.
 - f. Tip shot.
 - g. Two-hand jump shot.
 - h. One-hand jump shot.
4. Skill in free throwing.
 - a. Chest shot.
 - b. Underhand free throw shot.
 - c. One-hand push shot.
 - d. Overhead shot.
(Method best suited to the individual.)
5. Skill in running and footwork.
 - a. Rocker step,
 - b. Cross-over step.
6. Skill in stopping.
 - a. Running-stride stop.
 - b. Jump stop.
7. Skill in pivoting.
 - a. Rear turn.
 - b. Front turn.
 - c. Reverse turn.

8. Skill in dribbling.
 - a. High bounce.
 - b. Low bounce.
 - c. Drag dribble.
9. Skill in rebound recovering.
 - a. Offensive.
 - b. Defensive.
10. Skill in guarding.
 - a. Player with the ball.
 - b. Player without the ball.
 - c. Two-on-one situation.
 - d. Three-on-two situation.
11. Skill in screening.
 - a. Inside screen.
 - b. Running screen.
 - c. Rolling screen.
12. Skill in offensive team play.
 - a. Fast break offense.
 - b. Slow break offense.
 - c. Tip-off plays at center.
 - d. Out-of-bounds play.
 - e. Jump ball plays.
 - f. Foul shot plays.
 - g. Screening.
 - h. Freezing the ball.
13. Skill in defensive team play.
 - a. Man-for-man defense.
 - b. Zone defense.
 - c. Shifting zone defense.
 - d. Combination man-for-man and zone defense.
 - e. Jump ball defense.
 - f. Out-of-bounds defense.
 - g. Foul shot defense.
 - h. Shifting man-for-man defense.
 - i. Stalling offense.

III. Knowledges

1. Knowledge of the rules.
2. Knowledge of the terminology.
3. Knowledge of offensive strategy.
4. Knowledge of defensive strategy.
5. Knowledge of playing various positions.
6. Knowledge of how to keep score.

7. Knowledge of some prominent basketball personnel.
8. Knowledge of equipment -- its use and care.

IV. Attitudes

1. Readiness to cooperate with the teacher and fellow players.
2. Readiness to accept willingly the decisions of officials.
3. Readiness to play fairly at all times.
4. Readiness to act in a sportsmanlike manner in victory or defeat.
5. Readiness to give a top effort regardless of the apparent superiority or inferiority of an opponent.
6. Readiness to train and practice regularly and willingly.
7. Readiness to show respect and courtesy toward players and officials as a spectator.

BOATING (with oars)

Control Objectives

I. Condition

Adequate physical strength and endurance to handle the craft in rough water when necessary for a period of one-half hour.
This condition involves:

- a. Muscular strength in fingers, arms and shoulder girdles to control the oars and propel the craft under normal and severe weather conditions.
- b. Strong trunk and leg muscles to support the arm movements and to maintain balance in calm and in rough weather.
- c. A normal heart with adequate reserve power and a respiratory system conditioned to meet emergencies.

II. Skills

1. Rowing position

- a. Proper balance on seat
- b. Solid bracing for feet in comfortable position allowing for desirable leg assistance to aid rowing movements of arms

2. Rowing skills

- a. Proper grip on oars
- b. Oar blade position as to water surface Hard grip

- c. Reach to rear with feather oar
- d. Proper catch
- e. The pulling stroke
- f. Finish of stroke and recovery
- g. Reach and catch, etc.
- h. Rowing backward
- i. Turning and steering
- j. Single oar skulling from stern
- k. Approach to dock on other craft
- l. Stowing oars in craft
- m. Knots for making craft fast
 - (1) Two half hitches
 - (2) Square knot
 - (3) Bowline

III. Knowledges

- 1. Characteristics of the craft
- 2. Boat nomenclature
- 3. Selection of proper oars
- 4. Effect of winds, tides and currents
- 5. Maximum load of craft
- 6. Balance of craft
- 7. Necessary equipment, e.g. painter, bail, etc.
- 8. Craft control
- 9. Courtesy to others in or on water
- 10. Emergency techniques, e.g. when swamped in collision

IV. Attitudes

- 1. Proper use and care of craft
- 2. Safety of self and others
- 3. Right of way on water
- 4. Aid to those in distress
- 5. Personal desires vs. ability limitations

BOWLINGControl ObjectivesI. Condition

1. Physiologic capacity to participate in bowling as a leisure time activity.

The condition involves:

- a. Strength in arm to bowl the ball frequently and accurately during the game.
- b. Strength, balance, and agility to make the proper approach, delivery, and follow-through while bowling the ball.
- c. Strength and flexibility of the wrist to control the bowling ball during the delivery.
- d. Strength and flexibility of the ankles and knees to protect them from the braking action of the feet after the release phase of the delivery.
- e. Strength of the back to maintain correct bowling position.

II. Skills

1. Skill in delivering the ball.

- a. backswing
- b. release
 1. straight ball
 2. curve
 3. hook
 4. back-up

2. Skill in stance.

- a. position of feet
- b. holding the ball
- c. position at the foul line according to delivery

3. Skill in approach.

- a. three step
- b. four step
- c. five step
- d. body position

4. Skill in follow-through.

- a. body position
- b. position of feet in relation to foul line

5. Skill in bowling at pins.
 - a. bowling at the "1" pin.
 - b. bowling at the "1,2,3," combination for the strike pocket.
 - c. bowling at the "4,7,8" combination.
 - d. bowling at the "6,9,10" combination.
 - e. bowling at the "2,8" sleeper combination.
 - f. bowling at the "3,9" sleeper combination.
 - g. bowling at the "1,5" sleeper combination.
 - h. adjusting delivery for various combinations.
 - i. bowling at ten pins.

III. Knowledges

1. Knowledge of the history of bowling.
2. Knowledge of the rules.
3. Knowledge of the terminology.
4. Knowledge of playing courtesy and etiquette.
5. Knowledge of how to keep score.
6. Knowledge of equipment and its use and care.
7. Knowledge of some prominent bowlers.
8. Knowledge of on-going community bowling groups for later participation.
9. Knowledge of the proper and safe method of carrying the bowling ball to the alley rack.
10. Knowledge of the proper and safe way to pick up the ball from the rack.
11. Knowledge of how to choose the correct bowling ball.
12. Knowledge of league bowling procedures.

IV. Attitudes

1. Readiness to cooperate with the teacher and fellow bowlers.
2. Readiness to accept willingly penalties for foul line violations.
3. Readiness to participate fairly at all times.
4. Readiness to act in a sportsmanlike manner in victory or defeat.
5. Readiness to give optimum effort regardless of the apparent superiority or inferiority of an opponent.
6. Readiness to follow instructional information and demonstration regularly and willingly.
7. Readiness to show respect and courtesy toward players and officials as a spectator.
8. Readiness to participate in bowling during leisure time and after graduation.

CANOEING

Control ObjectivesI. Condition

1. A sound body with normal reflexes, coordinations and sense of balance. Strength and endurance sufficient to maintain control of craft in normal and rough water for a minimum period of one-half hour.

This condition involves

- a. Hand, arm and shoulder girdle strength and endurance to paddle canoe for an extended period.
- b. Trunk and leg strength to aid arms and to maintain balance and control of canoe.
- c. Sound heart with reserve power and effective respiratory system conditioned to meet emergencies.

II. Skills

1. Grasping the paddle

- a. Top hand position
- b. Lower hand position
- c. Paddle angles
- d. Arm position for best leverage

2. Position in canoe (lower center of gravity)

- a. Center or balance position
- b. Front and rear positions
- c. Placement of others and/or load (sitting on seats not desirable for control or safety)

3. Stroking and steering

- a. Jay
- b. Bow
- c. Sweep
- d. Draw
- e. Back water
- f. Push over
- g. Bow rudder
- h. Sculling
- i. Hand paddling

4. Safety Skills

- a. Diving into water from canoe
- b. Entering canoe in deep water
- c. Remaining in canoe when swamped
- d. Shake out canoe - two thirds of water
- e. Support companions across upturned canoe

5. Transporting Canoe

- a. Launching
- b. Docking
- c. Portage
 - Single person
 - Two persons
- d. Towing

III. Knowledges

1. Canoe nomenclature
2. Types of canoes
 - Advantages and disadvantages of each type - Limitations
3. Safety precautions
4. Emergency patching and repair
5. Proper type of stroke to use
6. Paddle selection - length, types, wood
7. Center of gravity
8. Effects of wind, waves, currents

IV. Attitudes

1. Proper use and care of canoe
2. Safety of self and others
3. Responsibility when others are in distress
4. Water courtesies
5. Personal desires vs. ability limitations

PLAYING HANDBALL

Control Objectives

I. Condition

1. To develop the capacity to play three games of full length at top ability without undue fatigue.

The condition involves the development of:

- a. Strength and flexibility in either shoulder girdle, arm, and wrist to hit the ball accurately and with power.

- b. Hardness and toughness in either hand to hit the ball frequently and with power so that the hands do not become bruised or overly sore.
- c. Strength and flexibility of ankles, knees, and trunk for protection from injury.
- d. Toughness of feet to withstand the pressure of continuous quick stopping and starting.
- e. Strength and endurance of legs to enable players to use frequent quick bursts of sprint-like energy in covering the court.
- f. Balance and agility of legs to avoid contact with other players or the walls and to maintain court position.
- g. Endurance of the circulatory and respiratory systems to go at top speed without appreciable loss of speed in covering the court and without a marked falling off of skill in executing shots.

II. Skills

- 1. Skill in using the hands.
 - a. Cupped hand.
 - b. Flat hand.
 - c. Fist.
- 2. Skill in footwork.
 - a. Executing shots.
 - (1) Right-hand shots.
 - (2) Left-hand shots.
 - b. Moving up (advancing).
 - c. Moving back (retreating).
 - d. Moving sideways.
 - e. Pivoting.
- 3. Skill in making the strokes.
 - a. Underhand.
 - b. Sidearm.
 - c. Overhand.
- 4. Skill in serving.
 - a. Initial position.
 - b. Footwork.
 - c. Stroke.
 - d. Placement of serves.
- 5. Skill in making kill shots.

- a. The straight kill.
- b. Outside corner kills.
- c. Inside corner kills.
6. Skill in offensive play.
 - a. Key stance and key court position.
 - b. Variety of shots.
 - c. Deceptive maneuvers.
7. Skill in defensive play.
 - a. Key stance and key court position.
 - b. Protecting the eyes.
 - c. Anticipating shots and position.
 - d. Returning shots.
8. Skill in doubles and cut-throat.
 - a. Service.
 - b. Teamwork.
 - (1) Court position.
 - (2) Returning shots.
 - (3) Placement of shots.

III. Knowledges

1. History of handball.
2. Rules.
3. Terminology.
4. Strategy.
5. Care of equipment and its use.
6. Etiquette.
7. Health precautions.
8. Training hints.

IV. Attitudes

1. An understanding and appreciation of the role of handball in American life.
2. An understanding and appreciation of the role of handball in keeping fit--a concept that involves the social and psychological benefits as well as the physical.
3. An understanding and appreciation of the importance of conditioning and regular practice.
4. The desire to play hard to win (will to win) at all times.
5. The habit of being able to win humbly and to lose without rancor.

6. The habit of playing in accordance with the letter and spirit of the rules.
7. A willingness to give and take good-naturedly inasmuch as most games are played without benefit of officials.
8. A desire and willingness to cooperate with partner in doubles play.
9. An understanding and appreciation of one's role as a spectator.

PLAYING SOFTBALL

Control Objectives

I. Condition

Physiologic capacity to play at top performance for the entire game of seven innings and to play in extra innings if necessary, without undue fatigue.

The condition involves:

- a. Running, in short bursts of speed, during both offense and defense.
- b. Strength of throwing arm and wrist to throw accurately in various positions and over varying distances.
- c. Strength in wrists, arms, and shoulders to facilitate a powerful and rapid swing while batting. Associated with this is strength of hip muscles to provide whip action of hips while batting.
- d. Balance and agility to provide for quick starts and stops and to permit running of bases without undue loss of time or addition of extra distance while rounding bases.

II. Skills

1. Skill in throwing the ball.
 - a. Overhand throw.
 - b. Side arm throw.
 - c. Underhand throw.
2. Skill in catching the ball.
 - a. Thrown balls.
 - b. Batted fly balls.
 - c. Batted ground balls.

3. Skill in batting.
 - a. Stance.
 - b. Stride.
 - c. Swing.
 - d. Follow through.
4. Skill in bunting.
 - a. Bunt for base hit.
 - b. Sacrifice bunt.
5. Skill in base running.
 - a. Stealing bases.
 - b. Running to first base.
 - c. Rounding bases.
 - d. Tagging up on fly balls.
6. Skill in defensive maneuvers.
 - a. Double plays.
 - b. Prevention of double steal.
 - c. Pickoff by catcher.
 - d. Cut-off plays.
 - e. Run downs.

III. Knowledges

1. Knowledge of the rules.
2. Knowledge of the terminology.
3. Knowledge of offensive strategy.
4. Knowledge of defensive strategy.
5. Knowledge of playing various positions.
6. Knowledge of how to keep score.
7. Knowledge of equipment--its use and care.
8. Knowledge of safety precautions.

IV. Attitudes

1. Readiness to cooperate with the teacher and fellow players.
2. Readiness to accept willingly the decisions of officials.
3. Readiness to play fairly at all times.
4. Readiness to act in a sportsmanlike manner in victory or defeat.
5. Readiness to give a top effort regardless of the apparent superiority or inferiority of an opponent.
6. Readiness to train and practice regularly and willingly.

7. Readiness to show respect and courtesy toward players and officials as a spectator.

PLAYING SOCCER

Control Objectives

I. Condition

1. To develop endurance and to make possible near peak performance throughout the game. The time of periods may vary from 8 to 15 minutes, depending on league rulings, plus overtime periods, if necessary.

The condition involves:

- (a) Running at sprint speed for the greater part of the contest.
- (b) Strength to permit shooting accurately with either leg.
- (c) Ability to dodge and change direction without considerable loss of speed while running to meet the ball, getting in position, or while dribbling.
- (d) Strength and flexibility of ankles and knees to protect them from possible injury while kicking, passing, running, dodging, and pivoting; also to prevent injury to an opponent through coordinated movements so as to forestall injuries to opponents and teammates.

II. Skills

1. Kicking

- (a) Low kick
- (b) Lofted kick
- (c) Pass with inside of foot
- (d) Pass with outside of foot
- (e) Volley
- (f) Half-volley
- (g) Reflection kick
- (h) Jab
- (i) Kick on the turn
- (j) Unorthodox kicks
- (k) Shot at goal

2. Trapping

- (a) Rolling ball
- (b) Falling ball
- (c) High ball
- (d) Waist high ball
- (e) Chest
- (f) Head
- (g) Thigh

3. Running with ball and dribbling
4. Passing
5. Tackling
6. Heading
7. Goalkeeping

III. Knowledges

1. Rules
2. Team formation and positional functions
3. Defense
4. Attack
5. Tactical practices
6. How to keep score
7. Knowledge of use and care of equipment

IV. Attitudes

1. Willingness to cooperate with teammates and teachers (coaches).
2. Desire to be sportsmanlike in practice and game situations.
3. Readiness to comply with decisions of officials.
4. Willingness to go all-out at all times.
5. Desire to be courteous to officials, teammates, as well as opponents.

SWIMMING AND DIVING

Control Objectives

I. Condition

Physiological capacity to swim adequately without undue fatigue certain specified distances.

The condition involves:

1. Kick with flutter kick at sprint speed for specified swimming distance.
2. Stroke with arm with sufficient power for sprinting a specified distance.
3. Breath control for length of time actual swimming procedure requires.
4. Coordinated movement of arms, legs, and breathing in complex movement of swimming.

II. Skills

A. Skill in kicking

1. Flutter kick
2. Flutter kick on back
3. Scissors kick
4. Frog kick

B. Skill in arm stroke

1. Overhand stroke
2. Breast stroke
3. Side stroke
4. Overhand back stroke

C. Skill in rotary breathing

1. Inhale through mouth
2. Exhale through nose

D. Skill in body position and buoyancy

1. Walking in water maintaining balance
2. Dead man's float
3. Jellyfish float
4. Regaining position
5. Rhythmic bobbing
6. Progressive bobbing
7. Treading water
8. Plunge and glide, body extended, toes pointed
9. Reverse position in water

E. Skill in diving

1. Sitting dive from edge of pool
2. Squat dive from edge of pool
3. Kneeling dive from edge of pool (one knee)
4. Standing dive from edge of pool
 - a. Initial stance and position
 - b. Take-off and spring
 - c. Body position
 - d. Entry to water
 - e. Recovery
5. Dive from board
 - a. Approach
 - b. Take-off and spring
 - c. Body position during dive
 - d. Water entry
 - e. Recovery

III. Knowledges

1. Knowledge of sanitary habits regarding swimming
2. Knowledge of safety regulations
 - a. In pool
 - b. In open water
3. Knowledge of swimming meet regulations
4. Knowledge of terminology
5. Knowledge of conditioning factors

IV. Attitudes

1. Readiness to cooperate with teacher and fellow swimmers
2. Readiness to train and practice
3. Confidence in water
4. Adjustment to water, physically and mentally
5. Willingness to accept evaluation of progress

PLAYING TENNIS

Control Objectives

I. Condition

1. Physiologic capacity to play at least three continuous sets of tennis singles without undue fatigue or lowered level of skill.

The condition involves:

- a. Running, with emphasis on constant and sudden stops, starts and changes of direction.
- b. Strength and flexibility of knees and ankles to protect them from the strains of sudden stops, starts and changes of direction.
- c. Strength and flexibility of wrist, elbow and shoulder to permit continued efficiency in executing the various tennis strokes.
- d. Acquired toughness of the skin on the feet and the racket hand, thereby permitting long and strenuous play without danger of blisters or other skin irritations.

II. Skills

1. Skill in serving
 - a. The flat serve.
 - b. The slice serve.
 - c. The American twist serve.

2. Skill in correctly executing the various tennis strokes.
 - a. The forehand drive.
 - b. The backhand drive.
 - c. The forehand volley.
 - d. The backhand volley.
 - e. The forehand half volley.
 - f. The backhand half volley.
 - g. The overhead smash.
 - h. The lob.
 - i. The forehand chop.
 - j. The backhand chop.
3. Skill in footwork while playing a tennis match.
4. Skill in court strategy while playing a tennis match.

III. Knowledges

1. Knowledge of recommended procedures in the selection and care of tennis equipment.

Including:

- a. Racket.
- b. Racket strings.
- c. Tennis balls.
- d. Shoes.
- e. Socks.
- f. Shorts.
- g. Shirt or blouse.
- h. Jacket.
- i. Wristlet.
2. Knowledge of the skills involved in correctly executing the various tennis strokes.
3. Knowledge of the rules of tennis.
4. Knowledge of the terminology used in tennis.
5. Knowledge of correct scoring procedure.
6. Knowledge of the basic strategy of both singles and doubles play.
7. Knowledge of the procedures in organizing and conducting team matches and tennis tournaments.
8. Knowledge of prominent personnel in the tennis world.
9. Knowledge of the outstanding tennis events of each year (i.e. major national and international tournaments).

IV. Attitudes

1. Readiness to cooperate with the teacher and fellow players.
2. Readiness to play fairly at all times.
3. Readiness to accept willingly the decisions of officials.
4. Readiness to place sportsmanship above winning.

5. Readiness to always play at top effort regardless of the apparent superiority or inferiority of an opponent.
6. Readiness to train and practice regularly and conscientiously.
7. Readiness to always show respect and courtesy toward players and officials when watching a tennis match.

PLAYING TOUCH FOOTBALL

Control Objectives

I. Condition

1. Physical fitness to perform at a high level for 40 minutes including any necessary overtime periods, without excessive fatigue impairment.

The Condition Involves:

- a. Running with agility and speed, when necessary, with satisfactory pulse rate recovery.
- b. Fine muscle strength and coordination sufficient to punt, pass, receive and carry the ball.
- c. Big muscle strength and body control for blocking and screening.
- d. Regular exercises for the ankles, knees, shoulders and neck for tonus and injury prevention purposes.

II. Skills

1. Offensive skills.
 - a. Running with the ball.
 - (1) Ball in safe arm position.
 - (2) Warding off defensive player (stiff arm).
 - (3) Changing direction (side step, cross over, dips, fake pass).
 - (4) Quick starts and ability to follow offensive blockers.
 - b. Passing the ball.
 - (1) Passing grip.
 - (2) Passing position (feet, weight, follow thru, both standing and running).
 - (3) Passers target (stationary, moving).
 - (4) Quick kick.
 - c. Receiving a pass.
 - (1) Catching with fingers and hand while giving with speed of ball.
 - (2) Follow ball with eyes into hands (head-dip).
 - (3) Catching spot passes, hook passes, stop and go passes and receiving over left shoulder, and right shoulder.
 - (4) Foot and body fakes prior to and after catching ball.

- d. Punting the ball.
 - (1) Position of feet, steps, lock knee-ankle, follow thru.
 - (2) Two hand release of ball.
 - (3) Punting for height, distance, and placement.
 - (4) Quick kick.
- e. Centering the ball.
 - (1) Center snap for running and punting.
 - (2) Position of feet, weight distribution, hand position and wrist.
- f. Blocking for ball carrier.
 - (1) Semi-crouch blocking in line.
 - (2) Semi-crouch blocking for punter.
 - (3) Screen blocking downfield.
- g. Receiving the punted ball.
 - (1) see d. (1) and d. (2) above.
 - (2) Fakes, reverses, and formations to return ball.
- 2. Defensive skills.
 - a. Two hand touch on ball carrier.
 - (1) Position, balance and body control.
 - b. Pass defense.
 - (1) Maintaining proper distance from receiver.
 - (2) Deflecting and intercepting ball.
 - c. Line play on defense.
 - (1) Straight charge.
 - (2) Fake and charge.
 - (3) Pursuit angles.
 - (4) Charging combinations to block punts.

III. Knowledges

- 1. Knowledge of rules.
- 2. Knowledge of terminology.
- 3. Knowledge of offensive strategy.
- 4. Knowledge of defensive strategy.
- 5. Knowledge of playing various positions.

IV. Attitudes

- 1. Cooperative with officials, players, captain, and quarterback.
- 2. Ability to engage in skillful play, rather than rough injurious competition.
- 3. Readiness to give a top effort, physically, as well as socially.

TRACK AND FIELD ATHLETICS

Control Objectives

I. Condition

- 1. An overall physical development adequate to enable one to

participate in his event or events at peak performance without undue fatigue.

This condition varies considerably with the event or combination of events chosen, but eventually involves the following items:

- a. Running, both for speed (sprints) and endurance (long distance)
- b. Strength for field events sufficient to carry one through trials and finals.
- c. Coordination, agility, and balance requisite for good technique in the hurdles and the field events and to prevent injury in the execution thereof.

II. Skills

1. Skill in running (sprints, middle or long distance).
 - a. Start
 - b. Middlepart
 - c. Finish
 - d. Arm carry
 - e. Knee lift
 - f. Body lean
2. Skill in hurdling
 - a. Start
 - b. Over the hurdle
 - c. Between the hurdles
 - d. Finish
3. Skill in the steeplechase
 - a. Hurdling and water jumps
4. Skill in relay racing
 - a. Baton passing
5. Skill in the shot put, discus, javelin, hammer or weight
 - a. Approach
 - b. Carrying the implement
 - c. Delivery
 - d. Recovery
6. Skill in the high jump, broad jump, hop-step-jump, and pole vault.
 - a. Approach
 - b. Take-off
 - c. Over the bar or mid-flight
 - d. Landing

III. Knowledges

1. Knowledge of the rules and etiquette.
2. Knowledge of strategy.
 - a. Racing
 - b. Field events
 - c. Full utilization of team strength

3. Knowledge of the seeding of heats.
4. Knowledge of qualifying trials.
5. Knowledge of scoring.
6. Knowledge of the use and care of equipment.
7. Knowledge of the history of the sport, including records and prominent personnel.

IV. Attitudes

1. Readiness to play fairly and act in a sportsmanlike manner in victory or defeat.
2. Readiness to practice regularly and willingly.
3. Readiness to accept willingly the decisions of officials and coaches.
4. Readiness to give top effort regardless of the apparent superiority or inferiority of an opponent.

GENERAL PLANT FEATURES IN HEALTH, PHYSICAL EDUCATION AND RECREATION FACILITIES

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The purpose of this paper is to present some of the high lights of the General Plant Features recommended* in the revision of the Guide** on Facilities for Health, Physical Education and Recreation. The standards and recommendations discussed below are not necessarily new but in much of past construction they have been overlooked or rejected as unnecessary or too expensive. Let us hope that in future construction they will be considered both desirable and essential.

In planning facilities for health, physical education and recreation there are certain features which are more or less common to several units of the total plant. These should be designed to provide for the safety and for the physiological and psychological comfort of pupils, teachers, participants, and leaders so that optimum conditions will prevail for teaching and learning and for recreation. The health and safety of participants in health, physical education and recreation activities is a serious public responsibility, and any compromise with best health and safety practices in designing new structures should be firmly resisted. Provisions should be made not only for safety of structure but also for ease of egress and circulation and for safety against fire and accidents. The features of design having safety significance necessarily include practically everything in the total plant. These are discussed throughout the Guide in the places where they appropriately apply. Ease of vision and hearing, temperature comfort, safe and sanitary environment, smoothness of traffic flow, efficiency of services, and attractiveness of surroundings are factors that should be considered.

This section supplements much that is included elsewhere in the Guide and consists of a discussion of lighting, heating, ventilation, electrical services, sanitary and service facilities, acoustical treatment, custodial facilities, provisions for traffic circulation, indoor surfacing materials, and the importance of color and aesthetics.

Lighting. Since eye comfort and efficiency are of paramount importance where the handling of a moving object is involved, quality and control of lighting are more important than the amount of light. In building facilities for health, physical education, and recreation, there-

* See Appendix.

** Planning Facilities for Health, Physical Education, and Recreation. 1956. The Athletic Institute, Inc.; 209 South State Street, Chicago 4, Illinois. Price \$2.50.

fore, we are concerned not only with foot candles but also with such factors as reflection, brightness balance, color, and fenestration.

As for light intensity, standards are stated in foot candles in the Guide* for the gymnasium, pool, recreation center, ice rink, corridors, kitchen, library, offices, examination room, lockers, showers, and rooms for dressing, for clubs, for games, for storage, for supply, for crafts and photography.

Brightness balance is the key to visual comfort and efficiency. To provide such balance it is necessary to reduce brightness differences to a minimum, i.e., to eliminate excessive intensity, shadows, and dark spots. If a brightness balance is to be provided with sufficient intensity for critical seeing, all surfaces should be done in light shades, with a flat rather than a glossy finish, so they will reflect light.

One other factor in preventing eye strain and poor vision is proper fenestration or the provision of natural light from multiple directions.

Foot candles, brightness balance, reflection, and fenestration--all these factors produce a situation in sharp contrast to the old dimly lighted gymnasiums with windows extending down to eye level or with lights, also at eye level, along the under structure of obsolete balconies.

Recent construction also features the orientation of pools, toilets, dressing-locker suites and other damp rooms so they will receive direct sunlight from the south.

Electrical Services. Full consideration in modern construction should be given to future as well as present needs when designing the electrical system. It is a certainty that there will be increasing use of electrically operated equipment, higher standards of illumination, and a need for special audio-visual effects. Services must be provided for fire alarms, program signal systems, clocks, telephones, intercommunication, public address systems, audio-visual equipment, radio-television reception, appliances and motors, and for outdoor facilities.

All electrical wiring and connections must be installed in accordance with the requirements of the National Electric Code of the National Board of Fire Underwriters* and with state and building codes and fire regulations. In addition to the provisions of these codes, some features, not required but highly desirable, are mentioned below.

For example, three-or-four-way switches should be provided at the head and foot of stairs, near the ends of corridors, at all entrances and exits to the gymnasium, to classrooms, to activity rooms, and to the pool. This makes it possible to turn the lights on or off from either end of a unit while passing through a building. Larger buildings should be wired for a signal system operated by a master clock. Secondary controls

* Op. cit.

* National Board of Fire Underwriters. National Electric Code. The Board: 85 John Street, New York, New York.

may be needed in the administrative unit of the gymnasium if time periods in physical education differ from the regular school or college program.

Means of intercommunication should be provided not only between the main administrative office and the physical education facilities but also between units in physical education.

At least one telephone is essential in each school or college recreation center. Doubtless, several extensions will be needed. A telephone for the pool is a must. Independent telephone service should be provided for the gymnasium, pool, health unit and other facilities to be used during hours when the central switchboard is closed.

"Built in" public address systems are provided increasingly in new construction. Such service is basic for indoor or outdoor facilities that accommodate sporting events, demonstrations, social or square dancing, or similar activities involving large groups.

Future planners will want to provide electrical service for audio-visual equipment. Many of the units such as gymnasium, auditorium, classroom, health units and multipurpose rooms will require projectors, tape recorders, record players, portable public address equipment, radio and television.

In the future there will be need to provide for transmission of radio and television programs. These programs not only will be public service broadcasts but undoubtedly increasing numbers of them will be closed circuit television instructional programs.

Heating and Ventilation. Past construction in heating and ventilating physical education and recreation facilities gave little or no consideration to the fact that the number and type of occupants may vary from one class of 40 physically active participants to several hundreds of inactive spectators. Consequently, we are all familiar with the gymnasium or pool which is either too cool or too warm for one group or the other.

New construction avoids this serious error. Special design of equipment and controls is now provided so the temperature and ventilation of a unit or facility may be operated independently of any other unit or facility. And, although air conditioning is not common, there is a growing interest toward providing air cooling systems in physical education and recreation facilities during summer months.

Sound Control. Most units in physical education and recreation facilities are likely to be excessively noisy. This is especially true in these days of fire-proof construction and informality of programs. This means that nearly every area in the building should be acoustically treated to accomplish three goals: (1) to achieve noise control, (2) to provide good hearing conditions, and (3) to reduce sound transmission from room to room.

Noise control is achieved by initial planning which calls for building sites far removed from congested areas and the separation of noisy play areas from classrooms, libraries, and study halls. Ventilating ducts may transmit noises from one area of a building to another. Improper location of doors and windows may also create a serious noise

distraction. Wall construction obviously is a factor in insulation or transmission. Mistakes in initial planning of space relationships are difficult, if not impossible, to correct.

Faulty construction may cause dead spots and distracting reverberations or echoes. Conversely, the absence of any sound reflection will deaden a room to an uncomfortable point.

The use of acoustical materials in physical education and recreation facilities poses such problems as these: Is it easily damaged? Can it be cleaned? Will it reflect light? It is fire resistive? All these goals can be approached if not completely achieved.

Sanitary and Service Equipment

Adequate, well-planned sanitary and service equipment are essential for the comfort and convenience of the users of health, physical

education and recreation facilities and for the promotion of desirable health habits among them. These include drinking fountains, lavatories, toilets, showers, cuspidors, hot water supply, soap dispensers, mirrors, hair dryers, etc., all strategically located and provided with the necessary piping, valves, fittings and hose bibs. All plumbing, of course, should meet the requirements of local plumbing codes.

All too frequently these facilities are more or less taken for granted and are not planned with the thoroughness that they should be. Mistakes in planning and constructing these features will cause discomfort, inconvenience and insanitary conditions for the 75 or 100 year life of the building.

Custodial Space

It is obvious that proper sanitation and efficient services require well-planned, strategically

located, and adequate custodial space. Custodial closets, slop sinks, supply storage space should be planned in relationship to the equipment and materials to be used. In the past, this type of planning has been sadly inefficient and doubtless we all know of examples of situations where custodial equipment must be moved across play floors, down long corridors or up or down stairs to get it to the place where it is to be used.

Traffic Circulation.

In former days we seldom heard much if anything about traffic control in gymnasium construction.

Either its importance was not fully realized or the architect had little conception of the program and the traffic flow necessitated by it. One of the most frequent and irritating errors has been construction which requires the crossing of wet and dry traffic near showers and swimming pools.

The main objectives in planning for traffic circulation are: minimum travel distances, reduction of traffic congestion, prevention of the crossing of wet and dry traffic, minimum disturbance of class work, provision for ease of supervision and desirable segregation, and for the increased comfort and safety of occupants. This involves the proper

location and size of corridors, lobbies, stairs and doors. It also requires direct entrances to seating areas, locker and dressing rooms, classrooms and playfields without requiring travel across the gymnasium floor, or pool deck, or through locker rooms.

Indoor Surface Materials

The selection of the best indoor surface materials for physical education and recreation is a difficult problem because of hard usage, excessive moisture and light reflection factors.

Hard maple is still believed to provide the best type of gymnasium floor although a good quality of birch or beech is acceptable. While it is the purpose in this paper to discuss construction, it does not seem out of place to mention a controversial issue regarding the finish, use, and maintenance of the gymnasium floor. When the floor is treated with borax or corn meal for dancing, it should be cleaned with a damp mop before it is used for games. Treatment of floors for multiple use with a hard seal finish makes possible a higher percentage of utilization of an expensive facility. Multiple use is recommended even though it will require more frequent treatment and, therefore, will increase maintenance costs.

Materials for walls and ceilings should be selected for proper sound control and also for their imperviousness to moisture and rough usage. Such materials are available.

Color and Aesthetics

Finally, a major consideration in modern construction of general plant features, is that of color and aesthetics. Happily, we are getting away from the drab, monotonous, prison-like surroundings and substituting color and beauty. Studies show the psychological responses of people, and especially children, to color and its favorable effect upon their attitudes and work habits. We also have learned that bright, attractive colors cost no more than drab ones.

Some examples will show the increasing use of color in physical education and recreation equipment and facilities. Colors are now used widely: on tumbling mats, on protective material placed on walls under basketball backboards, around supporting structure or framework of apparatus, in danger or foul areas, and in surfacing outdoor areas such as tennis courts and multiple use playground areas to reduce glare. Pieces of apparatus and playground equipment may be painted different colors for easy identification. Multipurpose gymnasium floors are painted with different colored court markings for the various games.

Summary

Only a few of the general plant features in facilities for health, physical education and recreation have been mentioned in a brief article of this type. For a full treatment of details the reader should consult the revised Guide now available at the Athletic Institute. This valuable document should serve as the facilities "Bible" for a long time to come.

APPENDIX

In addition to the writer, the committee members who were assigned at the National Conference on Facilities to prepare for Conference approval the revision of the section on General Plant Features were:

Dr. Dorothy F. Deach, Head, Physical Education for Women, University of Maryland.

Dr. Donald J. Leu, Associate Professor of Education and School Plant Consultant, Michigan State University.

Simon McNeely, Specialist for Health, Physical Education and Athletics, United States Office of Education.

J. L. Taylor, Specialist for Planning School Plants, United States Office of Education.

James D. Wooldridge, Assistant Supervisor, School Building Service, State Department of Education, Richmond, Virginia.

FACILITIES FOR OUTDOOR EDUCATION

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Michigan State University

The rapid growth of outdoor programs in schools and colleges and the increased use of the outdoors as a laboratory for learning for a wide variety of educational activities makes it necessary that consideration be given to outdoor facilities. It seemed particularly appropriate that the National Facilities Conference recognize the developments in outdoor education by including a chapter on resident camps.

While outdoor education activities require many types of facilities, some of them are relatively simple, except for resident camps which, if carefully planned and properly constructed, can serve the needs of schools, colleges, and community agencies. It was for this reason that the chapter in the facilities guide was devoted to resident camps.

If there are to be adequate facilities for the growing programs of organized camping and the extension of outdoor education activities in schools and colleges, resident camps should be built for year-round use and adapted to the needs of many agencies. Not only is cooperative planning necessary in order to get the most from the community dollar, but it is imperative if suitable lands and sites are to be obtained. Since school use of camps is largely for periods when there is the least use by agencies and private individuals for organized camping, year-round use can be achieved if there is cooperative planning.

There has been some excellent cooperative planning among conservation agencies, park departments, state education authorities, and school districts in designing new facilities and remodeling those that were inadequate for year-round use. State-owned camps are also being built in areas that will serve the larger population centers according to specifications recommended by school and camping leaders. Likewise, some of the youth-serving agencies and others are enlisting schools and other community groups in planning new camp facilities which can be used on a year-round basis. Some private camp owners are following the same practice. While the initial capital outlay for year-round use will be greater, the extended use will more than justify the expenditure.

In planning for the development of camps for schools and other agencies, the following topics were included in the guide:

1. Selecting the camp site.
2. Planning the layout and development.
3. Constructing the buildings and facilities.
4. Suggested types of camps.

It is hoped that the rather brief treatment of the planning and construction of resident camps will serve as an impetus for more consideration for many outdoor facilities and areas that will be needed in the years ahead. Only the joint action and cooperative planning of many agencies involved will make it possible to provide maximum opportunities for children and youth to live and learn in the outdoors.

THE NATATORIUM

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The purpose of this presentation is three-fold: (1) to indicate major problems which arise in the design and construction of a swimming pool; (2) to set forth guides to be followed in solving the problems; and (3) to indicate how the Air Force Academy solved some of these problems in the design of the swimming pools which will be constructed at the permanent site of the Air Force Academy in Colorado Springs.

The general discussion of swimming pool design and construction which follows is based upon the Report of the Committee on Swimming Pools of the National Facilities Conference conducted at Michigan State University in May 1956. Time does not permit a complete discussion of all problems covered in the aforementioned report which should be considered in the design and construction of a swimming pool. It is hoped that members of the association, who contemplate building a swimming pool, will consult the National Facilities Conference Report as well as other documents.

PLANNING CONSIDERATIONS

Services of Experts Thru Coordinated Effort

Reference to written documents alone will not suffice for the planning and construction of a functional swimming pool. The services of competent architects and engineers are highly desirable. In addition, other persons should be involved in the planning of swimming facilities. They should include: program specialists (physical educators and swimming instructors), pool operators, business managers, maintenance personnel and equipment manufacturers. Thru coordinated effort these people cause functional facilities to become a reality.

Visiting Existing Installations

Profiting by the mistakes of others in pool construction is an important planning consideration. The inspection of existing facilities, with an eye to ascertaining the defects and errors in layout and construction, is a valuable undertaking. Those persons directly responsible for planning a new swimming pool should visit as many swimming pools and natatoria as possible to secure ideas and prevent duplication of costly errors.

Form Follows Function

One basic architectural concept is that a facility should be designed to meet the uses intended. In other words, the design, location, size and type (indoor or outdoor) of swimming pool should be predicated on the activities to be conducted in the pool. Activities such as instruction, diving, water safety and survival swimming, recreational swimming, rehabilitation, synchronized swimming, demonstrations and water shows, competitive swimming and water polo are common to most swimming programs. It is important, then, that attention be directed to such things as: the number of personnel available for instruction and supervision, the desired size and number of class sections to be accommodated at one time, the number of intramural and intercollegiate teams practicing for or competing in water polo and swimming contests at one time, and spectator accommodations.

Economical Considerations

Since the cost of constructing and operating a swimming pool represents a substantial investment, it is imperative that careful planning be accomplished before construction in order to have a safe, functional facility which will serve effectively for many years. A planning committee should develop, or have developed, estimates of construction and operating costs as well as determine procedures for financing these costs.

MAJOR FEATURES TO BE CONSIDERED

Design

Various designs as to shape and depth of a pool have been developed -- rectangular, L-shaped, T-shaped and irregular shapes. The rectangular pool generally is satisfactory for all-purpose instructional use. L- and T-shaped pools are especially desirable where considerable diving is conducted. These shapes allow for separation of divers and swimmers and more shallow water. They can be constructed so that races can be in meters in one direction and yards in another; the deep area also provides an ideal layout for water polo competition. The irregular-shaped pool generally is not functional, but is aesthetically pleasing. Construction costs of such pools are considerably higher than rectangular-shaped pools.

Regardless of the shape of the pool, its length should be a fraction of an inch longer than 75 feet, 82-1/2 feet, 165 feet (55 yards) or 164-1/2 feet (50 meters) in order to conduct competitive swimming meets. The width of the pool should accommodate either six or eight 7-foot racing lanes with perpendicular turning walls at the ends. The minimum depth for diving is 10 feet for the 1-meter board, 12 feet for the 3-meter

board, and 15 feet for the 10-meter platform. Depth for water polo should be a minimum of 7 feet.

Traffic Flow

Too often little consideration is given to appropriate control of spectator and swimming traffic in and about the locker facilities and pool inclosures. The spectator area should be completely separated from the pool deck, with seats arranged parallel with the diving platforms, and directly accessible to public entrances and parking area. Adequate sight-lines for all spectators also should be designed. Swimmer traffic should be routed to pass from locker and/or toilet rooms to drying room to shower to pool. Large moats (with constant flowing water) located at all pool deck swimmer entrances will prevent anyone from entering the pool inclosure in street shoes. Other entrances to the pool deck, such as from equipment rooms can be provided with key-operated door knobs to permit entrance only by authorized personnel.

Circulation, Filtration and Purification of Water

Time does not permit extensive discussion of this topic. It is important to state, however, that a thorough investigation is necessary for this important aspect of pool construction. One important consideration is that a break should exist between the source water supply and pool circulation and between the pool drain and the sewer. This will prevent syphoning of pool water into source water and syphoning of sewage into the pool proper.

Filtration can be accomplished by one of three methods: gravity sand and gravel, pressure filters, and diatomaceous earth. Purification of water may be accomplished by means of ultraviolet rays, bromine or chlorination. The choice of filtration and purification methods is a matter of choice after careful investigation.

Overflow Troughs

State Boards of Health generally require overflow troughs. The design of the trough surrounding the entire pool should afford easy egress from the pool, and should be wide and deep enough to trap waves and maintain smooth water for competitive swimming. Drainage from the trough in more recent installations has been the "closed" system with controls for allowing overflow water to drain to the sewer as desired. A "closed" system is economical in saving water and permits a constant water level essential for smooth water.

Pool Markings

Pool markings function to indicate water depth, distance, lane numbers, guide lines, turn indicators and finish lines for various races.

Markings should be kept to a minimum to reduce confusion and set forth an uncluttered appearance. Numbers should be of contrasting color and large enough to be visible by all spectators. Guide lines for swimmers, 10-12 inches in width and running the length of the pool, should have appropriate "Ts" and breaks to indicate turning points. They should also be placed at the ends of the pool extending 3 feet below the surface of the water.

Underwater Lighting

Underwater lighting adds to the aesthetic quality of water shows and exhibitions. Either a wet niche or dry niche system may be used. The dry niche system requires a tunnel along the sides of the pool. The wet niche system, which is less expensive, does not maintain a flush surface and may cause injury. If lights are placed in the end walls they should be located so as not to interfere with competitive swimmers' turns. These lights should have a separate control switch so that they may be turned off during competitive swimming races to prevent "blinding" swimmers.

Heating and Ventilation

Temperature control in a natatorium is a complex problem, chiefly because the water should be one temperature (70-80° F) and the air should be comfortable for the swimmers as well as the spectators. The heating control system should be separate from the rest of the building since the pool may require heat during the summer months while the other activity areas will not. Radiant heating in the pool deck and mechanically circulated air, it is believed, will solve the problem of swimmer/spectator comfort. Air space between ceiling and roof with forced ventilation will minimize humidity and condensation.

Acoustics

In the past, swimming pools have been noted for poor acoustics. This problem can be reduced by the construction of suspended ceilings of acoustically treated material and the elimination of domed or arched ceiling design.

Lighting

For optimum observation of swimmers by spectators, there should be provided indirect lighting. Lights should be vapor-proofed and recessed in the ceiling. It is extremely important also that provisions be made for relamping and servicing light fixtures by some convenient means. Fluorescent lighting is especially good in swimming pools since it contains very little yellow coloring, which when combined with blue water will cause a green color. It also provides an even density of light. A minimum of 50 foot candles of light at water level is essential for

television and motion picture photography; 25 foot candles is considered minimum.

Deck Drainage

Too often pool decks are constructed so that water stands in small puddles in various spots. This is due primarily to the fact that drains are located in the center of deck spaces, thus requiring a considerable amount of grading to close tolerances. Ditch-type drains located at the outside edge of the pool deck will eliminate standing water. This also facilitates flushing and cleaning of pool decks especially if a raised coping surrounds the pool perimeter.

Ceiling Height and Water Depth for Diving

Ceiling height above a 1-meter and 3-meter springboard shall be a minimum of 15 feet. Ceiling height above a 5-meter or 10-meter platform should be a minimum of 10 feet, with 12 feet preferred. Such clearances will eliminate both real and psychological hazards to divers. Some means for agitating the water below the 5-meter and 10-meter towers also is essential for the safety of platform divers.

Continuous Inspection

It should be evident from the above discussion that there are a considerable number of factors to be considered in the design and construction of a swimming pool. There are many other factors which have not been discussed. Nor is the task completed when the drawings and specifications have been approved and contracts let. Periodic checks of construction are essential to insure conformity to plans and specifications.

UNITED STATES AIR FORCE ACADEMY SWIMMING FACILITIES

To illustrate some of the principles outlined above, major features of the Air Force Academy Swimming Pools, to be constructed during the next year and one half, will be briefly discussed.

Consultants

The Air Force Academy was extremely fortunate in securing the services of four (4) outstanding physical educators — Dr. William L. Hughes, Dr. Harry A. Scott, Dean D. K. Stanley and Mr. Joseph Rogers—to aid the Air Force Academy in establishing requirements, preparing design criteria and reviewing the Architectural Engineer's design. These men, recommended by the American Association for Health, Physical Education and Recreation and the College Physical Education

Association, spent considerable time in Denver consulting with all agencies and individuals involved in and affected by the design of the permanent site Physical Education Building. Former Olympic swimming and diving competitors and coaches also were consulted informally.

Concept Behind Design

It was the belief of those involved in the planning of the Air Force Academy athletic and physical education facilities that one building should be designed for physical education and intramural sports activities alone. This concept was adhered to, with the exception that one of the two swimming pools contained in the Physical Education Building was designed for intercollegiate competition as well as for instruction.

Another basic idea of the planning group was the principle that activity areas should be flexible to allow for large or small teaching stations depending upon need. This idea is reflected in the design of the two swimming pools.

Physical Education at the Air Force Academy

To understand the need for extensive facilities at the Air Force Academy it is necessary to know the scope of the physical education program. Eventually, the Air Force Academy is authorized to have a strength of 2496 cadets. Each of the cadets will receive instruction in 14 different sports activities during his four years at the Air Force Academy. In addition they are required to participate in either the intramural sports program (5 sports per season), or the intercollegiate athletic program, during the fall, winter and spring seasons. Class size is limited to not more than 35 cadets, and there will be 120 squadron intramural teams participating each season.

Swimming activities will include: instruction in swimming, life saving and water survival; intramural water polo and swimming competition, recreational swimming for cadets and their guests, water shows and intercollegiate freshman and varsity competition.

Traffic and Equipment Flow

In the design of the Air Force Academy Physical Education Building, the locker and shower facilities serve as a hub for all activities, with access to the swimming pools immediately adjacent to the shower rooms. Ramps connect the locker facilities with activity areas on upper and lower levels. Spectator entrances and galleries are above the deck level preventing persons in street clothes from entering upon the pool deck. Large storage rooms and elevators are also located immediately adjacent to activity areas, including the pools, to permit ease in moving and storing large pieces of equipment, such as boats, diving boards and the like.

Intramural Pool

The intramural pool contains three (3) moveable bulkheads which divide the total area into four separate pools — ideal for inter-squadron water polo competition or dual swimming competition. Dividing curtains will be suspended from the ceiling over each of the three bulkheads, thus creating four teaching stations for instructional classes. Ten feet of deck space surrounds the entire pool. Glass observation windows in the corridor above afford an opportunity to observe instruction or competition.

The Natatorium

The natatorium also is designed for multiple use. This pool will be equipped with two 1-meter diving boards, two 3-meter diving boards and a 5-meter and 10-meter platform. It contains two moveable bulkheads which can be positioned so as to keep the diving area separate from the swimming area. This design meets all F.I.N.A. requirements for Olympic swimming and diving competition. A spectator gallery is provided along the entire length of the pool on one side only.

The design of the natatorium will provide three separate teaching stations — swimming, diving and water survival instruction. It will also permit intercollegiate swimming practice for a freshman team and a varsity team. Recreational swimming will also be conducted in the natatorium, and locker room facilities for women have been provided for guests of cadets. This locker facility will serve a dual purpose by accommodating the visiting team during competitive swimming competition.

One unique feature in the construction of the Air Force Academy pools is the water circulation system. This system is designed with large inlets at the shallow end of the pool only, and a ditch drain located at the deep end of the pool at the intersection of the bottom and end wall. It is believed that this design will result in clearer and purer water. This design also will eliminate a large number of inlet fittings and piping and will make the pipes connecting the drains accessible for repair since they will be completely exposed in the filter room adjacent to and below the deep end of the pool basin. Cleaning the bottom of the pool also should be more effective since there will be no curvature to the pool floor as is found in the "hopper-bottom" pool.

The natatorium will contain dry niche, underwater lighting with an inexpensive, electronically controlled timing system which regulates two lights at the ends of the racing course. This system causes the lights to flash on and off at predetermined time intervals and thus may be used for pace training.

A scoreboard for competitive swimming and diving is currently being designed for installation in the wall opposite from the spectators' gallery. This board will be controlled electrically from a scorer's table located on the pool deck. The unique feature of this board will be a

direct-read timing device for first and last place which will permit the spectator to follow the time of all swimmers. Such an arrangement should increase spectator interest in and appreciation of competitive swimming.

One other item of equipment, yet to be designed, is a cockpit device which will simulate crash landings at sea. The Navy has utilized various devices of this sort and they will be consulted on the design and engineering of this piece of equipment. This will be removeable.

Other features of the Air Force Academy natatorium include: underwater observation windows, conduit for possible future installation of a closed circuit television system, a public address system capable of being connected to underwater speakers, spot lights for water shows, permanent starting blocks with recessed backstroke handgrips, turning targets on end-wall guide lines, and wall-hung cantilevered, removeable benches for swimmers and officials.

SUMMARY

This presentation has attempted to delineate the problems attending the design and planning of an indoor swimming pool; and further, guiding principles have been briefly outlined to assist in solving those problems. Illustration of these guiding principles has been based upon the swimming facilities designed for the permanent site of the Air Force Academy.

As soon as the status of planning and construction allows, the Consultants and the Air Force Academy will publish a detailed report of their investigations, including the major features of the Physical Education Building. It is hoped that such a publication will be useful to the profession in the design and construction of future facilities.

THE STADIUM

Richard Westkaemper
Wisconsin State College

As athletics became tolerated and finally accepted by educators as an integral phase of school and college life, the way was clear for the wave of stadium construction that began shortly after the turn of the century. Almost every school and college has some type of stadium because of the public desire to witness athletic contests. The primary purpose of the stadium is to provide seats from which spectators have a favorable view of athletic activities. This facility, however, can be used for other public events, such as stock shows, commencement exercises, rodeos, religious gatherings, and symphony concerts. The underneath portion of some stadiums can be utilized for a variety of purposes.

The size and design of stadiums vary considerably. In some instances, knock-down bleachers are placed at the side of an athletic field or court to accommodate spectators. In other situations, colossal structures accommodate in excess of 75,000 persons and provide extensive service facilities. Regardless of the size of the structure, thorough planning is imperative for the realization of a functional facility.

The Program as the Basis of Planning. The first step of planning is to determine the probable use of the stadium. The most extensive stadiums are erected to accommodate football and frequently track and field activities. Spectator accommodations also are provided for tennis and baseball, but the capacity is usually small. A structure that serves multiple purposes can be justified more readily than one used only five or six times a year. All facility needs of an educational institution, therefore, should be evaluated to determine whether any of them might be satisfied in the stadium project. The structure should be planned to serve as many aspects of the educational program as possible without limiting its primary purpose. Classrooms, bus garages, band rooms, dormitories, maintenance shops, offices, and courts or areas for physical education have been provided beneath solid deck spectator structures. Stadium facilities should supplement rather than duplicate existing facilities.

Factors of Design. State and local building codes and other minimum standards proffered by professional organizations or manufacturers associations should be used as guides in stadium planning. The shape of the structure is significantly affected by the extent of its seating capacity and the nature of the sports to be served. In addition to the technical aspects of construction, aesthetic values must be considered.

Often the construction of a stadium is opposed because its appearance and associated activities depreciate the values of the neighborhood property. The stadium should be designed to harmonize with the campus architecture and to perpetuate an aesthetic environment. Planned landscaping is essential to shield unsightly fences and for general appearance.

Stadium Size. The seating capacity of the stadium depends upon local circumstances. If funds can be made available, the structure should satisfy the present demand for admission to athletic contests and those likely to exist within a period of five to ten years. An extravagant overestimation of needs unduly increases initial costs and maintenance expenditures. The structure can be designed to permit economical expansion as the need for additional seating develops or in instances where the lack of funds necessitates the construction of a facility with insufficient capacity to meet present needs.

Stadium Finance. A school district or college should own and control the stadium which it uses for athletic contests. The funds for construction should be raised by the same means employed for other educational construction projects. Tax funds, student fees, bond issues, endowments, and gifts can be used. Gate receipts often provide funds for stadium construction. The predicted income from this source, however, without doubt should be underestimated so that the competitors are not forced to carry the burden of paying for the stadium. The educational purposes of athletics can be jeopardized whenever payment of debts depends significantly upon gate receipts.

Location. Ideally, a school or college spectator structure should be erected on the campus so that it can serve a variety of facility requirements. Activities conducted on the campus, furthermore, lend themselves to close supervision and guidance, and the stadium is accessible for maintenance. In cities with several secondary schools, a single stadium constructed, owned, and operated by the school system, provides more adequate facilities than possible if each school had its own spectator structure. In such instances, each school holds practice sessions on its campus but games are played in the central stadium. If possible the central stadium should be located on one of the high school campuses. Whenever space is limited and construction of the facility would create congestion and interfere with other aspects of the educational program, it should be erected elsewhere. Through long-range planning adequate campus space can be provided to include a stadium.

Parking. Vehicular traffic and parking of automobiles is an important problem of stadium planning that demands the cooperation of city, county, state, and school or college officials. Traffic arteries should be designed and located to permit orderly and uncongested gathering and dispersing of crowds. Many automobiles can be parked on the streets in the stadium vicinity. Vehicles often are parked so that private driveways are blocked, and the occupants trample lawns and shrubbery. Public relations with both the residents of the neighborhood and the spectators are improved when off-street parking areas are

provided. Students, faculty, and other persons can utilize the areas for daily parking if the location is accessible to other campus buildings. Under no circumstances should playfields, lawns, or courts be used for parking because the oil and grease drippings and tire ruts will damage the areas.

Other Factors. One of the most common errors of stadium planning is the duplication of facilities. It is true that the structure should serve multiple purposes, but the facilities should supplement rather than duplicate those that exist elsewhere. Locker, shower, dressing, and equipment rooms provided in the physical education building, for example, should also serve the athletic teams. Duplication of services increases initial, operational, and maintenance expenses and is seldom justifiable.

To maintain desirable public relations, the stadium should include such service facilities as rest rooms, concession booths, first-aid rooms, drinking fountains, and telephones. These facilities not only must be adequate in number and properly located, but should be designed to expedite cleaning operations. An attractive, clean, and healthful environment is imperative from the viewpoint of educators, spectators, and the residents in the area. Whenever a stadium is cluttered with wrappers and other types of paper, or rubbish from the area litters the neighborhood, poor public relations develop and the purposes of education are unfulfilled.

Another aspect of public relations pertains to accommodations for the press, radio, television, and similar personnel. These groups serve as a means of communication between educational institutions and the public. Facilities should be provided to house them and to expedite their work. The extent of the facilities will depend upon the local circumstances.

SUMMARY OF REPORT ON THE NATIONAL FACILITIES CONFERENCE

Ray Snyder
University of California, Los Angeles

Dr. Hughes, in discussing general plant features, based his remarks upon two basic concepts: (1) to provide for the safety of all persons concerned, and (2) to provide for the psychological and physiological comfort of pupils, teachers, participants, and leaders so that optimum conditions will prevail for teaching and learning and for recreation. Safety for all participants was considered as a serious responsibility and included not only safety in the structure of the facility but also for ease of egress and circulation and safety against fire and accidents. A stress was put on the standards of lighting and electrical services. Other factors discussed included heating and ventilation, including air conditioning, sound control, sanitary and service equipment, custodial space, traffic circulation, indoor surface materials, and color and aesthetics.

It was pointed out that in outdoor education many types of facilities are required for an extensive program, especially the resident camp which could serve the needs of schools, colleges and community agencies. These camps should be built for year-round use and planned for cooperatively by all interested groups. Cooperative planning was stressed for greatest economy and for service by the largest number of persons.

Dr. Mackenzie indicated a team approach in planning the natatorium including the services of expert professional personnel as well as the services of competent architects and engineers. Individuals having planning responsibilities should visit other installations and consult the professional literature on the subject. The basic concept in planning is that form follows function and that economical considerations such as construction costs, operating costs and methods of financing are very important. Major considerations include: design; traffic flow; circulation, filtration and purification of water; overflow troughs; pool markings; underwater lighting; heating and ventilation; acoustics; lighting; deck drainage; ceiling height and water depth for diving; and continuous inspection. A discussion followed on the planned swimming facilities for the United States Air Force Academy.

In planning the stadium the program for its use must be given basic consideration. Building codes should be carefully adhered to and the architectural design should be consistent with other campus structures. Landscaping and other aesthetic considerations should be planned for in building the stadium. Other planning considerations included the size,

financing, location, parking facilities, multiple use, public relations, and service facilities.

In the discussion following the reports on the National Facilities Conference, it was indicated that in planning facilities functional standards should be established to meet the following basic concepts: beauty, adaptability to purpose, accessibility, integration, multiple use, economy, safety, health and sanitation, supervision, isolation, utility, and validity. These concepts are not mutually exclusive but are interdependent and related. They are complementary and supplementary. Facilities in the areas of health, physical and recreation education should be functionally related. One who plans in accordance with the above concepts is obligated to study the detailed specifications for buildings and outdoor areas. The new edition of Planning Facilities for Health, Physical Education, and Recreation is a significant contribution to our professional literature and should serve well in the crucial years ahead in our profession.

"HERE AND THERE AROUND THE WORLD"

by

Earle F. Zeigler, Chairman
Foreign Relations Committee
The University of Michigan

This report is a follow-up of that which was presented at the last Annual Meeting and printed in the Proceedings. These short communiques are replies to a Newsletter which your Committee sent out in 1955 to 67 different countries, islands, and territories of the world. Previously we have reported on Argentina; Australia; Denmark; England; Hong Kong; India; Jamaica, B.W.I.; New Zealand; Puerto Rico; Russia (U.S.S.R.); Scotland; and Sweden.

AUSTRALIA - from A.W. Willee, Honorary Secretary of the 1956 World Congress and Editor of the Australian Physical Education Journal:

"A full post-Congress report is being prepared. Enclosed is a brief preliminary report of this fine meeting. We are pleased with your interest in our Journal. The loss of Sir Frank Beaurepaire was indeed a bitter blow. His building at the University of Melbourne is to be opened early next month. There has been considerable interest here in the Kraus-Weber tests."

Also from B.F.G. Apps, Senior Lecturer-in-Charge,
Univ. of Adelaide:

"We hope to hold the Commonwealth Games in Adelaide in 1962. Enclosed is a report which I prepared recently in connection with the teacher-training situation in Australian Physical Education. The essential point to keep in mind is that most of the courses here were established at the request of the Commonwealth Government. Subsequently they lacked somewhat the full local sponsorship and group enthusiasm, which would have been present if they had been created from within the University or even within the State. We should remember also that there is no tradition or experience from which to draw in the planning of these courses."

AUSTRIA - from Josef Recla, Fachlicher Leiter, Institut für
Leibeserziehung der Universität Graz:

Prof. Dr. Recla has very kindly sent a copy of the 4th part of his

bibliography "Wissenschaftliche Arbeiten uber Leibeserziehung". He plans to publish all four parts together, which should be interesting to our research people.

CANAL ZONE - from Edward F. O'Connell

Word comes from Mr. O'Connell about the excellent well-rounded program of physical education now available to students in the Canal Zone. We were most impressed with the diversity of activities being offered and the community interest in interscholastic contests held at night. The salary schedules and other advantages offered to the physical education teacher are outstanding.

CANADA - from Lorne Brown, President of the Canadian Association, located at the Teachers College in Vancouver, British Columbia:

"Our next biennial convention is scheduled for Halifax from June 23-27, 1957. Dr. J.B. Kirkpatrick, Dean of the School of Education at the University of Saskatchewan, will give the Mackenzie Memorial Lecture. There is some thought to organizing it on a workshop basis. The professional Registry development will receive further discussion."

DENMARK - from Prof. Emanuel Hansen, Physical Training Teacher College of Denmark, Nørre Alle 51, Copenhagen N.:

Professor Hansen has prepared an outstanding 110-page booklet (in English) which explains the development of Danish Physical Education. It is profusely illustrated and should prove most interesting to teachers of the history of physical education in the United States.

ENGLAND - from A.H. Gem, Senior Inspector of Physical Education (Men), of London County Council, located at the College of Physical Education, 16 Paddington Street, London:

"We hope to hold the Second Commonwealth and Empire Physical Education Conference in Cardiff, Wales in 1958 just prior to the Games. Three new films should be interesting to our American friends--(1) "Young and Healthy," which deals with the post-school physical recreation problem, and is handled by Associated British Pathé, Ltd., Pathé House, 133 Oxford Street, W. 1; (2) "Young Feet and Legs," which treats defects of the feet and corrective exercises, and is handled by Sports Films, Eskdale, Totteridge Lane, London, No. 20, and (3) "An Outdoor Lesson for Mixed Primary Children," which explains activity lessons for primary school children taught by the non-specialist teacher, and is obtainable through C.E. Gent, County Borough of Halifax, Education Committee, West House, Halifax."

INDIA - from Professor P.M. Joseph, Training Institute for Physical Education, Kandivali:

"Experiences like camp life, outdoor work, and something more than book-learning are being provided for the boys and girls of the high schools and Colleges. As such service camps are becoming the vogue of the day. 'Living, learn, and serve' is the motto of these camps, which are becoming an indispensable part of the education of India's youth."

IRELAND - from Prof. Alastair McDonald, Head of the Physical Education Department, Queen's University, Belfast:

"We are now becoming somewhat interested in Britain in the importance of testing. For a few years we have been developing a form of body conditioning based on a system of self-testing. We are more and more convinced that our school programmes were not previously working the boys hard enough. How little is really known about our work!"

JAPAN - from Torahiko Miyahata, Bureau of Higher Education, Ministry of Education, Tokyo:

Dr. Hisamatsu and the writer are members of the Executive Committee of the Japan College Physical Education Conference (Daigaku Taiiku Kyogikai, Bureau of Physical Education, Waseda University, Tokyo). The Yomiuri (one of the three large newspapers in Tokyo) arranged for the preparation of "The National Sports Festival of 1954," which was awarded a gold medal at the film contest in Italy. A reprint would cost 10,000 Yen (a little less than \$100.00). Another excellent film is a film on swimming entitled "The Challenge to the World Records".

NEW ZEALAND - from Philip A. Smithells, School of Physical Education, Univ. of Otago, Dunedin:

"I enjoyed the trip through Canada tremendously and was treated extraordinarily kindly wherever I went. Certainly I felt at the end of my trip back across America that I lived far too far away from the live minds in my profession."

PUERTO RICO - from Prof. José Seda and Dr. David Furman, Department of Physical Education, University of Puerto Rico, Rio Piedras:

Certainly Dave Furman has done an outstanding job in helping to create a professional spirit among the physical educators in Puerto Rico. A letter arrived in Spanish telling about the formation of a

Foreign Relations Committee within the Puerto Rican Association for Health, Physical Education and Recreation. The third meeting of this group was held from November 18-19, 1956. A first annual report was published.

SWEDEN - from Prof. Alvar Thorson, Gymnastiksektionen, Kungl Skolöverstyrelsen, Stockholm 8:

"I enjoyed very much the newsletter you sent me and enclose a copy of recently appointed instructions (in Swedish) for teachers of physical education, which I hope will give you an idea of the trend of physical education at our middle schools. One good film that we have is "Ungdomens Gymnastikmärke" (Young People's Gymnastics Badge). This is in two parts--one for boys and one for girls, and is sold by the Swedish Gymnastic Association, Kungsholmstorg 6, Stockholm for 195: - Sw. crowns per copy. It may be rented from the Gymnastic Association for 15 Crowns for both copies."

PHYSICAL EDUCATION IN ITALY

Arthur Weston
The Rice Institute

To understand the present philosophy behind the physical education programs of post-war Italy, it is necessary to look closely at the present economic situation and national program of education as it has evolved following World War II. It will then be possible to look at the present programs of physical education and athletics and view them in proper perspective in light of the present social, economic, and political conditions.

Traveling around Italy, whether in the busy capitol of Rome or the backward regions of southern Italy, one sees the results of World War II in both physical evidence and views held by the Italian people. And in addition, one sees the evidence of ten years of aid including 4.5 billion dollars from the United States. Look behind the material evidence of this boom for its causes, and one finds an injection of United States Aid.(1)

In Rome, Italians show a modern railroad station, financed mainly by the United States. Many Romans exhibit more pride in this new building than in the ancient ruins of the Coliseum or the Forum. In Southern Italy, still the poorest region, one sees countless new farmhouses, mechanical equipment, and miles of new irrigation canals all financed in part by United States aid. In Northern Italy great industrial progress has been made in the production of steel, automobiles, cement and water power. Industrial production in Italy is now twice as great as before World War II. Farm output has soared so high that Italy, once heavily dependent on food imports, now is well on the way to self support in food.(2)

After the start of the Marshall Plan aid to Italy in 1948, the United States began to build up the productive power of the country it had rescued from collapse. In this effort the United States has given or loaned Italy 1.6 billion dollars. There is evidence of this aid throughout the country. In Turin there is now one of Europe's finest automobile plants turning out cars for Fiat, Italy's number one auto maker; new machinery here was financed with the help of 27 million dollars in United States aid. Italy produces more than double the amount of steel turned out when Mussolini's regime was in power. The United States largely financed a new chain of steam power plants stretching from Genoa in the North to Palermo on the Southern Island of Sicily.(3)

United States officials agree that their goal was to bring about Italian economic recovery as quickly as possible. As they see it, they

had no choice but to funnel United States aid mainly into government controlled enterprises in a country where the State's share of industry includes 80% of shipbuilding, 65% of iron and steel industry, 70% of passenger carrying merchant marine, 35% of the manufacturing industries, and 25% of the electric-power industry. Officials now agree that more money must be allocated to private business, education, and other social enterprises. Virtually all Italians agree that there would be no boom at all had it not been for United States aid. The United States has been chiefly responsible for Italy's post-war recovery. This post-war recovery may be summarized as follows:

<u>Electric Power:</u>	38 billion kilowatt-hours per year compared to 15 billion prewar
<u>Steel Output:</u>	5 million tons annually, compared to 2.3 million tons under Mussolini
<u>Auto Production:</u>	300,000 cars per year, against 59,000 prewar
<u>Tractors on Farms:</u>	25,000 now, 1,600 prewar
<u>Wheat:</u>	9.5 million tons produced last year, 5 million tons average per year prewar
<u>Shipping:</u>	Wiped out during the war, now rebuilt to 4 million tons over prewar
<u>Industrial Production:</u>	Double the 1939 level.

EDUCATION IN ITALY

Summary of population and school enrollment:

Total population of Italy:	47,138,000
Total area of Italy:	116,000 square miles
Population density:	406 persons per square mile
Total enrollment--all schools:	5,275,239 (47% girls)
Official legal tender--lire:	100 lire equals 0.16 U. S. dollars
Public expenditure on education:	31,000 lire per pupil

Legal basis of education in Italy:

The constitution of the Republic prescribes the general standards for schooling and establishes State schools for all levels. Organizations and private persons have the right to set up schools and other educational establishments without support from the State. The law in fixing the rights and duties of non-State schools which ask for a status of parity, should assure them full freedom and grant their pupils the same scholastic treatment as obtains for public school pupils. A State examination is prescribed for admission to or completion of the different levels and types of school and for certification for professional activity. Institutions of higher education have a right to autonomous status within the framework of State laws.

The constitution provides that the school shall be open to all and that lower education lasting at least 8 years shall be compulsory and free. Students of merit and ability, even if they lack means, have the right to pursue studies to the highest level; the State to ensure this right by providing scholarships, family and other allowances, on a competitive basis.

Administration:

The central organ for administering education in Italy is the Ministry of Public Instruction. It is headed by a Minister and one or more undersecretaries of state.

The Ministry comprises a number of departments or directorates-general for these fields: general affairs and staffing; primary education; general-secondary education; technical education; higher education; academies and libraries; and exchanges with foreign countries.

Other parts of the Ministry of Public Instruction which do not have departmental status are: the central committee for popular education; the general inspectorate for private secondary schools; the office of post-war assistance; the special office of physical education; and the school building service.

The central authority is represented in each provincial capital by a body of permanent officials headed by a rector. He has jurisdiction over the public primary and secondary schools in the province and also exercises supervision over private schools.

For local administration, each province is divided into a number of school districts, with an inspector of schools in charge; the districts are further sub-divided into teaching groups headed by directors. As a rule each teaching group consists of 60 to 100 teachers.

There is no intermediate organ between the principals of secondary, classical and technical schools and the rector. Universities and institutes of higher education depend directly on the directorate-general for higher education.

Finance:

All schools in Italy, including technical and vocational schools, come under the Ministry of Public Instruction; from the administrative point of view a distinction is drawn between State and independent schools, according to whether or not the costs are borne by the State.

The education budget is established by the Ministers of Public Instruction and of Finance, and then submitted to Parliament for approval. No direct aid is given to independent schools at the secondary and higher levels; at the primary level subventions are paid to schools for handicapped children, and to recognized private nursery schools. The State provides financial aid, through the Ministry of Public Works, to local authorities which undertake school building. Supplies are assured to poor pupils by the committee of school patrons.

Education is free to the end of the fourteenth year of age - that is, throughout the primary and intermediate school stages. In other schools fees are charged, but these are very modest.

Private Schools:

The Italian Constitution recognizes the right of organizations and private persons as well as of the State, to found schools. Control of non-school establishments is carried out by the central authority at two levels: the directorate-general for elementary education supervises private primary schools; and a special inspectorate secondary schools.

A varied grading is applied to private secondary schools: they may be treated as equivalent (to State schools), legally recognized or authorized (in which case the studies have no legal standing). At the end of the course students take State "maturity" examinations.

Pre-school Education:

Pre-school institutions which take children between the ages of 3 and 6 are known by the general name of "maternal" schools. They represent the preparatory stage for primary education.

The only State institutions at this level are the kindergartens attached to primary normal schools and the "maternity schools" attached to the normal schools for teachers of the infant schools. A number of the schools are run by municipalities and religious orders, but the majority are due to the initiative of private persons and bodies.

Primary Education:

The period of compulsory schooling corresponds to the primary school for pupils from 6 to 11 years of age and to the intermediate school and the lower secondary vocational school for pupils from 11 to 14 years.

The primary school curriculum comprises these subjects: religion; moral, civic, and physical instruction; manual work; Italian; arithmetic and geometry; history and geography; science and hygiene; drawing and handwriting; singing. The school course falls into two stages, the lower course (first three years) and the higher (fourth and fifth years). In primary schools in rural areas or thinly populated regions each teacher takes charge of a number of classes.

The cost of public primary schools is shared between the State and the municipalities. The State provides for the teachers' salaries and the local authorities undertake the upkeep of the school.

Secondary Education:

Two stages may be distinguished, intermediate and upper. The former stage includes the middle or intermediate school proper and the lower secondary vocational schools. The intermediate school lasts three years; the curriculum includes religion, Italian, Latin, foreign language, history, geography, mathematics, drawing, and physical training.

Students who pass the intermediate school final examination receive a diploma qualifying them to enroll in higher secondary schools (lyceums,

teacher training schools, etc., as well as in technical institutes). A two-year course of study is given in the technical schools.

The upper stage of secondary education comprises classical, scientific, teacher training, and technical schools. The classical lyceums date from 1859, and were recognized in 1923 and in 1942. The course of five years falls into two stages: two years (known as the upper gymnasium) and three years (lyceum proper). The curriculum includes Italian, Latin, Greek, history and geography, philosophy, natural science, mathematics and physics, history of art. At the end of the course students take a "maturity" diploma by an examination set by a State Commission that gives access to the university facilities.

Vocational Education:

The technical schools giving a course of two years and the technical institutes a course of 5 years, belong to the secondary education category. The institute diploma is a qualification for posts of importance in agriculture, industry, commerce, the merchant marine and women's professions (such as rural and commercial specialists, navigators, mechanics, teachers of needlework and domestic science, etc.).

Higher Education:

This is given in universities and higher institutes. Italy has 23 State universities and 4 higher institutes. In addition there are a number of private universities and institutes. The curriculums in private establishments are identical with those of the State universities and higher institutes and the degrees they grant have the same validity. There is a standard single degree granted by Italian universities. Foreign university degrees have no legal validity in Italy.

Teacher Training:

The teacher-training school provides a 4-year course which leads to a certificate qualifying for a teaching post in a primary school. The curriculum includes religion, Italian, Latin, history and geography, natural science, chemistry and physics, mathematics, drawing, singing, philosophy, education, psychology and the theory and practice of teaching methods.

Intending primary school teachers take the four-year course of a teacher-training school after completing an intermediate school course. The professional part of the curriculum consists of pedagogy, psychology, and practice teaching.

Students who receive the diploma from a teacher-training school may obtain a temporary post in a public school or teach permanently in a private school, or enter for the competitive examination which leads to permanent appointment in the State system.

Teachers in secondary schools and lyceums are required to have university training with a degree related to the subject they teach. They are also expected to take the competitive examination organized periodically by the Ministry of Public Instruction.

Teachers with permanent appointments are public servants, graded approximately within the levels XI to VI of the public service. The average salary of a teacher with 15 years of service and two children would amount to 64,000 lire a month. The maximum pension rate is reached after 40 years of service, the minimum after 20.

Special Education:

Special schools for children with physical, mental, and sensory defects are partly private, partly supported by the State; a few depend directly on the State.

Level of Education and Type of School	Number of Institu- tions	Number of Teachers	Number of Students
Nursery and Infant Schools.	12,380	24,090	932,231
Primary School (public).	34,837	157,524	4,306,614
Primary School (private).	4,919	11,989	333,196
Secondary (general public).	1,065	32,604	387,287
Secondary (general private).	1,762	17,631	155,078
Teacher Training (public).	146	4,898	44,512
Teacher Training (private).	320	3,687	25,951
Schools for Infant-School Teachers . . .	32	365	1,558

Physical Education in Italy:

Italian physical education programs are considered a vital and necessary part of the total program of education at all school levels. It is an area of knowledge which stands on an equal basis with economics, mathematics, physics and other subjects. The physical education teachers are usually well educated men and women and highly respected by their colleagues, students, and other members of their community. The Italian physical education teacher's knowledge of the biological sciences is considered on a level nearly as high as Italian medical doctors.

In Italian teacher-preparatory schools, colleges, and universities, physical education major programs and physical education degrees are recognized as an academic discipline. The Italian student -- who is a major in physical education -- is thought of primarily as a future teacher of physical education who will have a tremendous responsibility when he accepts a position to help mold the children of Italy into responsible adults of the future.

Programs of physical education in the schools of Italy are composed mainly of rhythms, calisthenics, sports and games. Athletic competition in the schools is limited almost wholly to participation in the physical education classes. Italian students are required to enter programs of physical education at all grade levels. Almost all major athletic competition in Italy is confined to club activity which may be either amateur or professional.

Athletic clubs are located in nearly all cities and towns of Italy. These clubs are financed primarily by funds from the Italian Olympic Committee. The Italian Olympic Committee is considered to be the wealthiest national Olympic Committee in the world. Money is raised by - - toto calcio - - a form of betting on Italian soccer matches. Approximately one million dollars per week is raised for a period of eight months. This money is used to provide facilities, equipment, and instructional staff for the selected activities. In addition most of the physical education teachers in the schools who teach soccer and track and field receive part of their salary from this fund.

Schools and colleges in Italy do not organize a great variety of highly skilled teams to represent a school in competition against other schools. The only highly organized sport in the schools is track and field; this sport is organized so that all interested students may be on a track and field team according to demonstrated ability and compete against athletes of similar ability. Soccer is one of the major sports of Italy and in the hearts of soccer-loving Italians is the national sport. (However, track and field holds this official position in Italy.) Soccer is taught in physical education classes and played by teams within a school while soccer clubs handle the highly organized amateur and professional teams of Italy.

PHYSICAL EDUCATION IN GRADES ONE THROUGH FIVE

The physical education programs in grades one through five consist mainly of rhythmic activities and lead-up games. Emphasis is on movement with the children given the opportunity to create most of their patterns of movement. Rhythmic movement is combined with the basic factors of effective movement including balance and timing. A feeling of confidence is created by enabling the children to experience the feeling of accomplishment through dexterity and skill. The physical education teachers realize the importance of keeping the children busy. The Italian physical education bulletins stress the need to maintain class organization so that each child is active. Physical education becomes an integral part of the child's school day. (The requirement for physical education states that one hour per school day must be set aside for physical education.) In the early grades physical education is taught entirely by the regular classroom teacher.

One of the major goals of this physical education program is for all-around physical development. The children are allowed to progress at their own rate of speed and respond to the demands of teachers through their own creativity and ingenuity. The unity of body and mind is stressed frequently to help the children realize that learning is a total process of mental and physical action. The children are not forced into activity for which they are not prepared, hence, their movement patterns are usually original and purposeful to the children. The supervisors of Italian physical education agree that this plan is enabling the

children to move forward rapidly in physical development. The lead-up game approach is helping to provide the Italian children with a great variety of physical skills that may be used for countless activities in later life.

Following World War II, facilities and equipment were not adequate in most Italian schools. Classes in physical education were usually too large, ranging from 38 to 55 per class. However, since 1950 conditions have improved tremendously; facilities and equipment are now adequate in most cases and very good in the larger cities. Physical education class size in these early grades is now down to 30 to 34 in most schools.

PHYSICAL EDUCATION IN THE UPPER GRADES

The philosophy of physical education, as it is presented in Italian pamphlets from the Ministry of Education in Rome, runs a close parallel to the American philosophy of physical education regarding sports and games. A foreign observer reading these pamphlets immediately feels as though he were reading an American textbook on the principles and objectives of physical education. The Italian program of physical education is centered upon a program of sports and games closely paralleling the American program with soccer substituted for football. And even football is being played in Italy as a result of the sports programs of American servicemen. However, the Italian physical education programs for the upper grades stress calisthenics and apparatus much more than the American programs.

Children in these upper grades are introduced to a program that stresses the fundamentals of movement. The physical education teachers are urged to use a great variety of physical movements in their programs so that their students will become proficient in over-all physical movement. The Italian literature stresses this point for two main reasons. First, all types of physical movement are necessary for optimum physiological development; and second, children should be taught how to handle their bodies in all types of physical activity to meet challenges in later life.

The emphasis on gymnastics stresses posture training as one of the desirable outcomes of such a program. The recognition that there may be many good postures is evident and the concern is for physical efficiency and self-expression whether standing up or sitting down.

The upper grades, colleges, and universities of Italy emphasize individual and dual sports more than the schools and colleges of the United States. Tennis and fencing are extremely popular in all regions of Italy; winter sports are emphasized and taught in most schools of northern Italy; swimming and water activities are becoming chief recreational activities for Italians of all ages who have proper knowledge of the activities and adequate physical condition. Soccer, track and field, volleyball, and basketball are the team sports enjoyed by the Italian athletes who enjoy the team games. In Venice, the art of handling a gondola is

first in the hearts of the boys of Venice when a sport is considered.

Swimming is becoming a sport of major significance throughout Italy as shown by the emphasis on the construction of swimming pools. The capital city of each province plans to have a swimming pool as soon as possible. At the present time there are 96 pools under construction or recently completed. They are being financed jointly from State tax money and constructions from the Italian Olympic Committee.

OLYMPIC GAMES: ROME, ITALY — 1960

The Olympic Games in 1960 are to be held in Rome, Italy. The games will be held at the Italian Forum which is a huge complex network of athletic facilities originally projected in 1928 and partly constructed before the outbreak of World War II. Following this conflict these facilities have been completed under the direction of the Italian National Olympic Committee known as CONI. The major units are constructed as follows:

OLYMPIC STADIUM

The original designs of this structure by Architetto Constantini were later modified by Architetto Moretti. The Projects Department of the Italian National Olympic Committee (CONI) subsequently made large modifications to the original plans and the completed parts of the building were demolished to make way for a new structure. The Stadium was inaugurated on March 17th, 1953 on the occasion of the International Football Match between Italy and Hungary.

Dressed entirely in Travertino Romano Stone and having a capacity of almost 100,000 people, the Olympic Stadium embraces an area of over 90,000 square metres. It is 319 metres in length, 186 metres wide and 16 metres in height. The 30 kms. of tiers, which are fitted with wooden benches, are reached by no fewer than 65 entrances to allow a rapid entrance and exit of the spectators.

This structure is ideally suited to large gatherings especially for light athletic and football events since it is provided with a regulation 400 meters running track, facilities for throwing and jumping competitions and a full-size soccer pitch.

CONI BUILDING

Designed by Architetto Del Debbio, it was inaugurated in 1932 and assigned as headquarters for the Superior Institute of Physical Culture. When the CONI took over the Italic Forum this building was adapted to serve as headquarters for its activities as the principal national sport body in Italy.

COLLEGE OF MUSIC

This houses two auditoriums of the RAI (Italian Radio) and two swimming pools. These latter are situated in the left wing of this large

double bodied building built to the plans of Architetto Costantini. The smaller pool, called the Sospesa on account of its being built in one of the higher parts of the building, measures 25 metres x 8 metres. The larger pool, which is at ground level, is situated in a vast hall measuring 62 metres x 36 metres. The pool itself measures 50 metres x 18 metres. An abundance of light is provided by a glass wall running the whole length of the pool from floor to ceiling, while on the opposite side there are six ample tiers in marble to accommodate spectators. The large pool which varies in depth from 1.5 metres at the shallow end to 5 metres at the deep end where fixed and adjustable diving boards are installed, is lined in white marble, the surrounding promenade being laid in mosaic with inlaid designs depicting marine life.

STADIUM OF STATUES

This is one of the most characteristic and outstanding of the components of the Forum. It is so called because of the 60 marble statues, each 4 metres in height and the work of some of the most famous Italian sculptors, mounted on top of the 10 marble tiers which have a capacity of 20,000 people and which surround the playing fields and track. This Crown of statues forms a most impressive finish to the Stadium which is built of huge blocks of marble to the designs of Architetto Del Debbio.

TENNIS STADIUM

This comprises six courts and an outbuilding where the various services are housed. It has wide tiers for seating with very ample curves at each corner. Eighteen marble statues placed on top of the highest tier form a most attractive and unusual skyline. A subway connects the outbuilding with the courts. This monumental structure is the work of Architetto Costantini.

FORESTERIA

This is composed of two fabrics siamesed together. It has dormitories, dining halls and relative services for 400 people. It is at present used as living quarters by the Tours Committee of the Ministry of Education and by students from the Superior Institute of Physical Education. The building was designed by Architetto Del Debbio.

PALAZZO DELLE ARMI

This building, composed of two distinct structures joined together at right angles, is used for Fencing events. The principal hall measures 45 metres x 25 metres and can accomodate 160 Fencers at one time. At present the building is occupied by the Superior Institute of Physical Education, but the large hall is used from time to time for Basket Ball Games.

FARNESINA STADIUM

This most modern building is adapted to light athletic events and was only recently built by the CONI. It can accommodate 500 people. Both the

tracks and platforms have a hard court finish (tennisolite) and they are of regulation size, while the six dressing rooms to accomodate 200 athletes and public conveniences are situated under the tribunes.

CRITERIA FOR EVALUATING COLLEGE PROGRAMS IN ATHLETICS

Samuel E. Barnes
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Integrity is truly the essence of life, whether it describes the life of an individual or an institution. Integrity must be maintained if ethics, controls and highly dedicated purposes are to prevail. This demands a spirit which seeks the truth at all levels; a training which is insistent on finding facts; a desire to use this information for the good of all; the ability to see broadly, to judge fairly, to think straight, to feel deeply, and to act fearlessly. Ruskin once said,

“The entire object of true education is to make people not merely do the right things but to enjoy the right things, not merely industrious but to love industry, not merely learned but to love knowledge, not merely pure but to love purity, not merely justice but to hunger and thirst after justice.”

The criticisms leveled against college athletics are caused by the failure of institutions to refrain from confusing purposes. Responsibility for declaring its aims and objectives rests upon each institution of higher education. Their declared programs should fall within the accepted patterns of higher education. They should be stated comprehensively and unequivocally, and each institution should provide the facilities necessary for their realization.

In the present state of vagueness and confusion about the aims of athletics it will be a wholesome activity for college and university administrators to turn their attentions to a more careful definition of their academic objectives.

American college educators cannot adhere to the Chinese tradition and content themselves with merely passing on the wisdom of the past. The facilities and activities of any institution should make it a center for intelligent and principled conduct. Society makes wide demands. If these critical demands are not met, institutions of higher education might well cease to be the foundations of our civilization and will become its greatest menace.

It is assumed that institutions were founded and are maintained for the purpose of educating the students who enroll in them. This is the purpose of education and this is the ideal to which educators are committed.

The attention of the collegiate program should not be directed solely to the classrooms or laboratories. Student experiences should be broad and many opportunities must be offered to develop them. If any

successful enterprise inter-dependence prevails; the foot cannot say to the hand, "I have no need of you." What concerns any part of the offerings of an institution concerns all parts, and every feature of the common task of thoroughly educating students should fall within the combined interests of faculty members, administrators, alumni and students.

The present educational emphasis is upon seeing the "whole" child. We have read articles and have heard speeches about seeing the child in his total environment. This implies that the child evolves as a result of many factors. It is foolish to try and dissect him from what he is and from what has contributed to making him what he is.

It seems to me that the same procedures are needed in viewing the "whole" college program. It, too, is the product of many influences and any attempt to dissect it separates the parts and breaks the continuity of the whole.

Many educators conceive of athletics as being unique. They refuse to acknowledge the value of sports in the total scheme of collegiate programs. Faculties hide their heads like ostriches and believe that in so doing they have blotted out their responsibilities to see athletics as a part of the college program.

Intercollegiate athletics are posing a weighty problem today in institutions of higher education. Attempts to reconcile beliefs and practices have developed shocking results. It is no longer possible to shrug off lightly the present controversies. The place and purposes of college sports are verbally batted back and forth like a tennis ball. The sides are distinctly drawn and athletics are suffering because of the adverse publicity. Many questions need to be answered if intercollegiate sports are to be preserved. Do sports have emotional, physical, social, moral, recreational, and intellectual values? Are sports educational or commercial? Should athletics be treated as a part of the regular institutional program or as a distinct entity apart from the other aspects of the curriculum? These and many other questions are asked. Most of them are ignored or poorly answered.

It is my belief that the dilemma of athletics is caused by the practices and purposes of college and university administrators. Practices in athletics are allowed to exist which violate not only the athletics code of ethics, but the purposes and intent of higher education. Whether athletics have a vital influence upon the educational experiences of those who participate, and whether they reflect the true ideals of the institution, will depend upon how well the combined wisdom of all college officials is translated into practice.

The fundamental issue is that of determining the role of athletic programs within the over-all educational program. Institutional heads must accept the responsibility for clearly defining the functions of higher education and interpreting them clearly enough to convince their students and supporters. The judgments of the public will be based largely upon how well these announced purposes are communicated to them.

This person is convinced that the athletic "problem" is not

unsolvable. It could be solved within a reasonable period of time if institutions and individuals would come off the defensive and become honest with themselves and others. The athletic situation cannot be solved solely by resolutions of associations and conferences. The National Collegiate Athletic Association and the National Association of Intercollegiate Athletics have done magnificent jobs in trying to keep athletics within the educational framework. However, collegiate administrators must help by showing a willingness to "stand up and be counted" and by holding to a keen sense of academic purpose in the face of seemingly overwhelming outside pressures which may cause them to compromise their principles for a mess of material pottage. Outside agencies are powerless without institutional cooperation.

The time has come for administrators to take direct and full responsibility for the enforcement of educational standards. Therefore, it is imperative that each institution evaluate its athletic program in the light of its written and avowed purposes. At the same time, these institutions must examine their programs continuously to determine the degree to which these purposes are being achieved.

The athletic complex will not be dissolved by evasive defenses or prejudiced recriminations. No sane athletic program can be conducted unless educators interpret the intent as well as the true aims of intercollegiate athletics. In the final analysis the athletic program reflects the desires of the institution. When an institution declares its athletic principles it clarifies its beliefs as to the values of sports.

Colleges and universities have assumed prestige in the American culture. They are important centers for developing the social patterns, the leadership, the beliefs and the culture for a continuance of democratic living in the future.

Such an exalted responsibility necessitates integrity. Educational experiences should exist in an environment where high moral and intellectual values prevail in actions as well as in words.

The direction which extra-curricular programs take depends upon the philosophical beliefs manifested by an institution. The administration of athletics truly evolves from the principles contained in its over-all educational concepts. These concepts determine the exact place of athletics in the total curricular program. If athletics are used as an end and the players as means to that end, then the fine values of sports are dissipated and athletics assume disproportionate importance. If athletics are to serve as a medium of strengthening virtues then the exploitation of athletics and athletes for pecuniary gains, institutional prestige, and alumni satisfactions must be opposed bitterly.

The fault is not with intercollegiate athletics—but with those who are responsible for them. As Cassius said to Brutus, "The fault, dear Brutus, is not in our stars, but in ourselves." Who's to blame? Can the situation be likened to the problem child in the school?

The College President:

Such rawness in a student is a shame,
But, lack of preparation is the blame.

The High School Principal:

Good Heavens! What crudity! the boy's a fool,
The fault of course is with the grammar school.

The Grammar Principal:

Would that from such a dunce I might be spared!
They send them up to me so unprepared.

The Primary Teacher:

Poor Kindergarten blockhead! and they call
That preparation? Worse than none at all.

The Kindergarten Teacher:

Never such lack of training did I see;
What sort of person can the Mother be?

The Mother:

You stupid child! But then you're not to blame;
Your father's family are all the same.

These verses best illustrate how responsibility has been passed on. When the temptation to alibi is absent, would not each one have to admit that he may be and probably is a factor contributing to the final failure? All are engaged in the business of directing a dynamic and developing personality.

In institutions of higher education responsibility for athletics has been passed on. No one is willing to accept actively the responsibility for their existence. However, in truth, many people must admit a part in their development and present state of affairs, i.e., educators and administrators, coaches and athletic directors, alumni, and the general public.

In my judgment, athletics cannot be conducted properly until every one of these mentioned persons becomes actively concerned. Unification of thoughts is imperative. Therefore, it seems to me that somehow the combined opinions of these people can be brought to bear on the place and purpose of athletics. Therefore, a study was launched to determine the attitudes of persons who are to any degree concerned with athletics. A list of statements - pro and con - about sports was lifted from the literature and forwarded to the following persons:

- a) Administrators
- b) Directors of Athletics
- c) Directors of Physical Education and Recreation
- d) Directors of Intramurals
- e) Athletic Coaches
- f) Student Body Presidents
- g) Alumni Secretaries
- h) Directors of Publicity
- i) Faculty Representatives

These individuals were asked to read the statements and to evaluate them in terms of their beliefs. The results were tabulated and on the basis of the returns a set of criteria was drawn up. Those statements which did not receive the consent of the combined group were not included as criteria. Those which did receive the approval of those who returned the questionnaire were accepted as criteria for evaluating intercollegiate athletics.

The study was national in scope and the respondents represented a random sampling of the listed persons in all-size institutions throughout the United States. The research showed that there is general agreement among individuals in institutions that sports have educational values and make profound contributions to the campus life of colleges and universities. Independent of the rest of the college program, sports become overemphasized — they create sizable problems which cannot be evaded. All athletic programs suffer when athletics are attacked in a few schools.

The calling of attention to the athletic situation is not new. Charles Eliot, the President of Harvard, turned his attention to the abuses of athletics in 1892; the Carnegie Report, in 1929, pointed up the need for unified action to eradicate the evil influences which had crept into athletics in American colleges and universities. The N.C.A.A. introduced the Sanity Code to its members in 1947 in an attempt to establish and maintain the highest standards of institutional integrity regarding athletic policies. However, in 1951, this Code died because when time came to punish violators, support was lacking. However, we are finding more and more cases on record to prove that this body has taken giant steps ahead in bringing those institutions to task which have not met the standards expected of all members. Mixed reactions have resulted. Some schools have declared that they will adjust their programs to comply with the N.C.A.A. regulations. Others have been adamant and state that they refuse to accept the findings as being true and will take steps to prove their innocence. Several conferences and conference commissioners have meted out punishments to allied colleges in substantiating the findings of the National Collegiate Athletic Association. These are efforts to bring athletic practices in line with desirable standards. Institutions are informed that controls will be enforced and those who violate established rules and regulations will be punished.

The concern of the study was with the over-all program of athletics as they relate to the total educational program. An attempt was made to establish standards which could lead to a new direction of effort in developing and maintaining acceptable athletic programs. The belief was, and is, that each institution must decide what values it will seek. Each must accept responsibility for a definition of its own purposes. The developed criteria would serve as guides in the determination of how an individual institution measured up to the standards generally agreed upon as being acceptable and necessary.

The study hoped to direct attention to an area of higher education which demands careful appraisal. It hoped to point up the need for

standards and to offer criteria which would assist administrators in evaluating their sports programs objectively. Athletics must contribute to the aims and objectives of higher education if they are to fulfill their purposes in the programs of colleges and universities.

The criteria which were included in an evaluative score sheet had been selected by a group of reputable individuals from all over the United States representing not only conferences but coaches and educators, as well as athletic directors, administrators, students, alumni secretaries and faculty representatives. The selected standards represent the combined judgments of these persons. Each standard was scored on a basis of 0,1,2, or 3 according to the following scale:

Excellent - 3 - the provisions or characteristics called for in the given standard are extensively met.

Good - 2 - the provisions or characteristics called for in the given standard are met to some extent.

Fair - 1 - the provisions or characteristics called for in the given standard are met to a limited extent.

Poor - 0 - the provisions or characteristics called for in the given standard are not met.

The letter "M" could be used in instances where the provisions or characteristics called for in the given standard are missing but are not considered appropriate, necessary, or desirable for that institution. Therefore, it was felt that the standard could be omitted without interfering with the effectiveness of the athletic program to any degree.

Likewise, the letter "N" could be used if the characteristics or provisions called for in the given standard are missing and needed. However, if they were present the effectiveness of the athletic program would be increased.

If either symbol was used rather than a numerical score, reasons for the use of the symbol should be explained in each case.

Seven areas were considered and the selected standards were grouped under each:

1. Institutional Administrative Policies governing the Program of Intercollegiate Athletics.
2. The Organization and Administration of the Intercollegiate Athletic Department Program.
3. Equipment and Facilities.
4. Medical and Health Services.
5. Financial Aid.

6. Eligibility and Participation.

7. Publicity.

The highest score which could be gained was 252 if an institution met each standard extensively. The researcher felt that some standards were rejected which are necessary and important and should be included if the athletic program is to retain the place which it should have in the total educational program.

In my opinion the following criteria must be adopted if athletics are to exist in educational institutions as bona fide curricular offerings for students and staged for students primarily without the commercial aspect being a prime consideration. Like any tool of collective human affairs, anything and everything depends on how it is formulated and used.

1. The chief administrative officer is held responsible for the wholesome conduct and control of intercollegiate athletics.

He should deplore hypocritical subterfuge and not sit back complacently without knowing what is going on or condone malpractices by silence.

2. Each institution should publish its athletic principles clearly in the college catalogue.

Each institution must be held accountable for adhering in practice to published statements of policies.

3. Standards for admission should apply to the athlete and non-athlete alike.
4. Transcripts and records of all prospective students should be sent to and processed through the admissions office.
5. No student should be admitted to the institution who has not met the required standards for admission. He should not be permitted to remain unless he has maintained an acceptable average in working toward a degree.
6. The institution should adopt and set up machinery to enforce its standards and to correct any problems or abuses which may occur in the athletic program.

7. The institution should adhere to regulations instituted by its conference, association and accrediting body.

These organizations need support from every source to carry on their program of education and enforcement.

8. Coaches should be hired who are professionally prepared to render pro-real educational service through athletics.
9. Coaches should have professional status, tenure and salaries comparable to other faculty members.
10. Coaches should not be retained or dismissed on their success in providing winning teams but on the basis of the contributions which they make to the education of students.

Coaches are helpless in the whirlpool of high-pressure athletics and have no security unless they are supported by the president and board of trustees. Many of the character and citizenship values today are not being developed under today's system of athletics. The high-type coach who lives for high standards and ideals, and who is a real faculty counsellor does not last long if he loses.

11. The president of the institution should let it be known, in writing and in conferences, to the Athletic Director and coaches that violations of rules and ethics will not be tolerated.
12. The financial control of the program of intercollegiate and intramural athletics should be similar to control exercised over other activities and programs of the institution.

All athletic funds are received, disbursed and audited by the business office and athletic expenses are included as part of the general college budget.

13. No offers of scholarships should be made until a student's application for admission has been received; nor are any promises of financial assistance given prior to the enrollment of the student in the institution.

Aid must be limited to the actual educational expenses of the student. All holders of scholarships or grants-in-aid must be required to maintain high performances in and out of the classroom if they are to retain this assistance. Financial aid is based upon academic performance and economic need. All forms of financial

assistance must be awarded by the regular agencies of the college which grants aid to students. Where financial aid takes the form of remunerative employment the amount, nature and quality of service rendered must be commensurate with the pay. No financial award must be conditioned upon an agreement to participate in intercollegiate athletics.

14. The president should file annually with the conference a "declaration of principles" confirming the institution's support of and adherence to the constitution, principles, policies, rules and regulations of the conference.

Can honesty, respect for law and order, good sportsmanship, and integrity be taught if those in responsibility don't practice what they preach?

15. Tryouts of high school athletes, their entertainment and/or transportation expenses should not be permitted.

16. Bowl games and past season games should not be engaged in.

These games are commercial in nature and are the "phim" for which teams compete in order to fatten the athletic coffers.

17. There must be a broad program of intramurals which are maintained on equal basis with intercollegiate athletics.
18. Contests should be scheduled only with institutions which have comparable philosophies, programs, standards of competition and enrollments.
19. The program of intercollegiate athletics is an integral part of the broad program of physical education.
20. The institution should foster a democratic athletic program in which all teams are given equal consideration in treatment.
21. A team physician should be employed, either part time or full time whose duty is the care of school athletes.

He must be assisted by a school trainer who is responsible for the carrying out of the suggestions of the doctor in terms of treating athletic injuries.

22. The college should have insurance for each player to cover the expenses for care of injuries.

23. The institution has a published announcement of the precise qualifications for each type of financial aid available for its students.
24. The college should require that all aid in money, or in kind, except that which comes from one's own family, be administered by the institution.
25. Participation in athletics should be open to any regularly enrolled student.
26. A program of publicity should be designed to educate students, faculty members, alumni, the general public and newspapermen as to the true place and purpose of athletics in the total program of the institution.

These are by no means the only criteria which should be used as measuring sticks for determining acceptable athletic standards. I don't confess to have the answers. I may not have made a single new suggestion. These are merely reminders that the nature and direction of athletic programs cannot be ignored. It will mean that organizations such as the College Physical Education Association must not remain silent when the profession of physical education is involved in the misunderstandings brought about by malpractices in athletics.

When all is said, what is needed for the solution of the difficult problems of intercollegiate athletics that confront us, and therefore for the preservation of athletics and of the purposes they were created to serve, is more integrity, a heightened sense of responsibility and a more intelligent approach. If the magnitude of the situation can be properly appraised it is not unreasonable to believe that institutions will admit their mistakes and square away their athletic programs. With dedicated leadership it is possible to transform the possible into the actual. If institutions express a willingness to face the issues fairly and develop sports programs which truly contribute to the over-all educational betterment of their students the future of athletics in American colleges and universities will be bright with promise. As Oliver Wendell Holmes once said, "The great thing in this world is not so much where we stand, as in what direction we are moving."

NEW DIRECTIONS IN INTERCOLLEGIATE ATHLETICS*

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In seeking to understand intercollegiate athletics, it is necessary to consider one of the essential characteristics of American institutions of higher learning. Colleges and universities are chartered by the several states primarily to provide for the education of young people and to promote the general welfare of society. It seems apparent, then, that everything that takes place in an institution of higher learning must in some way — through instruction, research, or services—contribute to the educational welfare of the students and of society. It is because colleges and universities promote the general welfare that they, along with religious institutions and charitable organizations, are exempt from public taxation. Colleges are not (nor were they ever intended to be) commercial institutions. Obviously, then, athletics must exist in institutions of higher learning in order to contribute to the goals of education and to the improvement of the social order. If the program cannot be justified as an integral phase of the educational curriculum, then it is exceedingly difficult, if not impossible, to explain why it belongs in the college at all.

FALLACIOUS NOTIONS

Certainly athletics cannot be justified merely because it provides amusement to the public. Nor can it be defended on the grounds that money derived from athletic contests is essential to the financial structure of the college. In this connection it is true that a few of the more powerful, favorably located colleges and universities, athletically speaking, earn large sums of money through gate receipts, guarantees, sales of television and radio broadcasting rights, participation in bowl games, and similar lucrative commercial enterprises. However, most institutions of higher learning that attempt to bolster their finances through athletics learn by bitter experience that it is easier to force the proverbial camel through the eye of the needle than it is to make money from athletics. Where financial profits from athletics are concerned, the question must also be resolved as to the extent an educational institution, exempt from public taxation, is justified in expecting to profit financially through the toil of non-paid amateurs, who are supposedly participating in the game because they love it.

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Moreover, athletics cannot be justified for its propaganda values to the college, since the proof of a worth-while institution of higher learning lies not in the championship quality of its athletic teams but in the contributions it makes to the world of scholarship and research, and in the qualitative achievements of its faculty members and students. Obviously, then, if athletics cannot be defended because of its entertainment, money-making, or propaganda values, it must be justified on the basis of its contributions to the educational goals of the college.

A PHASE OF GENERAL EDUCATION

Fortunately, as a component of the program of physical education, athletics, if properly conceived, organized, and taught, can be justified as an integral phase of the general education of all students. General education may be defined as "that part of the educational program which seeks to develop in the student the common understandings, skills, and attitudes needed to function effectively as a person, as a member of a family, and as a citizen in a democratic society."^{1/} By and large it is agreed that general education seeks to develop skills, understanding, knowledge, attitudes, and appreciations which will help the individual live more effectively in a complex society such as ours. To accomplish this, the college is obligated to provide experiences which will aid the student in developing a deep and abiding concern for others, a high plane of moral-ethical values, and the means to live effectively and happily with his fellow men.

General education seeks to widen the student's perspective in terms of past and present, affording him an understanding of his role in the world at large. This background for the individual is not an end in itself; it is a means for a fuller life and for a stronger and freer democracy. In these trying days of international tensions, citizens are needed who are responsible, mature, resourceful, capable of making sound decisions on critical issues, and, if necessary, bearing arms in defense of these decisions. Thus, it may be seen that the goals of general education demand more than the mere mastery of a body of knowledge; they must be understood and interpreted in terms of improved behavior.

If athletics is to be made worthy of a place in the educational curriculum, then those responsible for the program must delineate clearly and concisely the possible outcomes of participation in competitive sports and the manner in which the activities of the program can best be organized and conducted to provide maximal education experiences for college youth. These programs must in fact, as well as in theory, contribute to the general education of all students. This means

^{1/} Raymond A. Snyder and Harry A. Scott, *Professional Preparation in Health, Physical Education, and Recreation* (New York, McGraw-Hill Book Company, Inc., 1954), p. 52.

that athletics, working cooperatively with the traditional academic disciplines, will so conduct its program as to enrich the lives of students by helping them to engage in experiences designed to produce the maximum development of their total personalities; improve their abilities to live harmoniously and cooperatively with others; attain competences leading to economic efficiency and independence; and enjoy the privileges and discharge the obligations of enlightened democratic citizenship.

FACULTY CONTROL

One of the troubles with athletics is that personnel in this area of education have never really been expected to solve the problems in the field. From the very beginning, in 1852, those involved in athletics as players or teachers were considered interlopers in the academic domain. To control this encroachment, special faculty committees were established to prevent the athletic tail from wagging the educational dog. Because of this unhappy assignment, perhaps, academicians tended to exhibit a superiority over, and a healthy distrust of, anyone connected with intercollegiate athletics. As the inevitable problems arose in athletics they were, therefore, resolved for not by personnel responsible for the program of competitive sports. When, in the course of events, faculty members were forced to control athletics through committee action, much of their attention was directed toward the formulation of prohibitions designed to curb the program and everyone who was concerned with it. The thou-shalt-not philosophy of control, instituted in the early days of athletics, is very much in evidence today. The philosophy still seems to be "when in doubt, add a prohibition."

OUTSIDE CONTROL

The early development of such athletic conferences as the Pacific Coast Conference, the Western Conference (Big Ten), and the National Collegiate Athletic Association (NCAA), was merely an extension beyond the campus of the principle of faculty control. At present it must be clear even to the most casual observers that faculty committees on athletics, athletic conferences of faculty representatives, the faculty-dominated NCAA, and the faculty-operated regional and voluntary accrediting associations have not been eminently successful in curbing malpractices in the program of intercollegiate athletics. Had they been successful we would not at this very moment be plagued with the same unresolved problems that have faced athletics from its beginning, more than a hundred years ago. Conversely, while it is true that these organizations have been unsuccessful in solving many of the problems of athletics, it must not be assumed that they failed to add anything of value to the program. On the contrary, these groups stepped into the breach when

little was known about intercollegiate sports and brought some semblance of order out of chaos. The NCAA particularly, through its rules-making functions and in many other ways, has fostered and strengthened understanding and gained the acceptance of athletics in the colleges and universities throughout the United States.

IF YOU CAN'T LICK 'EM, JOIN 'EM

Not only has control by faculty members failed to curb traditional abuses in athletics, it sometimes appears that the academicians have joined forces with the athletic barbarians to create new abuses. If current practice is a criterion, it seems that in some institutions of higher learning there exists a giant conspiracy to by-pass established rules and disregard principles of ethical conduct in order to achieve status in athletics. Otherwise it is difficult to explain why students of low academic qualifications are admitted to the college; or how athletes acquire lucrative "scholarships" which have little or nothing to do with scholarly performance; or why special dormitory and dining facilities not available to other students are open to the chosen few in athletics; or why special privileges regarding class attendance are accorded athletes but not other students; and how it is that special curricula are tailor-made for athletes, especially designed to keep them eligible. It is difficult to understand how these things happen when academic faculty members and administrative officers representing a cross section of the entire college are directly responsible for policy and practice in many of the areas involved.

CRUCIAL ISSUES

Since the very beginning of intercollegiate athletics, faculty committees, conferences, and other groups have developed regulations covering the minutiae and superficialities of the program of competitive sports. Today, policy-making and policy-regulating bodies continue in the traditional pattern. In their eagerness to curb current abuses of one kind or another, these well-meaning groups consistently fail to resolve basic issues underlying intercollegiate athletics. The report of the College Presidents Committee of the American Council on Education was an attempt in this direction, but it was pretty generally ignored by athletic governing bodies.^{2/}

These crucial issues in intercollegiate athletics do not lie alone in such matters as the recruitment and subsidization of athletes, or in the scholastic averages to be maintained by the participants, or even in the problem of whether or not to permit spring football practice. Although

^{2/} Special Committee on Athletic Policy of the American Council on Education (Washington, American Council on Education), 1952.

it is highly important to draw a sharp line between what is amateur and what is professional in athletics, the crucial issues do not center alone on attempts to enforce to the letter our outmoded amateur code, which was handed down to us with few alterations from ancient Greece, by way of eighteenth and nineteenth century England. These troublesome and sometimes reprehensible practices represent only the symptoms of more important and deep-seated malignancies which lie elsewhere in the field. Once these malignancies are discovered and removed, perhaps the annoying symptoms will wither and die.

If the problems mentioned above are not the most important in the field of athletics, then what are the basic issues? Among them are the following:

1. Should athletics contribute to the general education of all college students, or should its primary function be to entertain and amuse the public by using only a few highly selected, narrow specialists in the field of sports?

2. Should athletics be an integral phase of the educational curriculum financed out of appropriated funds and controlled by the institution in exactly the same manner as chemistry or biology; or should it be conducted as an extracurricular activity that uses for its selfish purposes the good name of the college, its facilities, and a few highly selected students, but operates more or less independently outside the structure of the college under a different philosophy and set of goals, and different policies relating to finances, personnel, and other aspects of the program?

3. Should the philosophy, policies, and practices adhered to in other areas of the college govern all action in the program of intercollegiate athletics; or should the principles and practices of business and commerce guide the action?

REFORM: A PROFESSIONAL PROBLEM

If the crucial issues of athletics have not been resolved by faculty committees on athletics, athletic conferences, the NCAA, the regional and voluntary accrediting agencies, or by others, then who can be relied on to bring about this long overdue and much-needed reform? The answer is that reform in intercollegiate athletics is as surely a professional problem as are departmental problems in chemistry, biology, engineering, or mathematics, and must rest squarely on the shoulders of professional personnel in these fields. The colleges must rely for reform upon the teachers of competitive sports (many people call them coaches, but they are teachers) and those in the department of physical education who administer and supervise the program of intercollegiate athletics. Indeed, because of an amazing lack of foresight in the past, and the pursuit of goals that are primarily uneducational, to say the least, these persons must now accept major responsibility for the sorry state of present-day intercollegiate athletics. These are the persons who

have intimate knowledge of the malpractices in the field. These are the ones who initiate and nourish the abuses. For these reasons they should be held responsible for bringing them to an end. This is the way it is done in other departments of the college and there is no valid reason why it should not be done in athletics.

This grass-roots approach to the solution of problems in athletics involves some of the basic issues relating to human conduct. One of these issues involves the delineation of responsibilities. The time has come in American education when the program of intercollegiate athletics should be accorded full curricular status. Those in charge should have responsibility for making the program conform to the educational goals of the college and should be held strictly accountable for their actions. The traditional distrust by academicians of anyone connected with athletics has served to deny status to those entrusted with this program. This fact is evidenced in many colleges by the faculty committee of academicians appointed to give surveillance to the program of athletics, primarily, it must be assumed, to keep it honest. Equally justifiable would be a committee of physical educators assigned to the task of "advising" the department of chemistry on how to conduct its affairs. This practice would not and should not be tolerated by the chemistry department. The paternal system of faculty control through the committee on athletics serves as a buffer between the program of competitive sports and the academic and general publics. It also provides a billowing skirt behind which the bad boys of athletics hide to avoid accountability for their acts.

In encouraging people to exert their best efforts, it is essential not only that responsibilities be delineated clearly but also that a climate of confidence and trust be established in the college. If enlightened action is to be expected, then it should proceed on the thesis that personnel in athletics are intelligent, professionally trustworthy and honest, and fully capable of solving educational as well as athletic problems. Moreover, it rejects the notion that professional people in this field must be legislated into practicing honesty and integrity. While it is probably true that people can be forced to conform to a code imposed from above, honesty and integrity are most effective as guides to conduct when the individual draws upon his own inner resources to govern his actions. He does right, not because it is forced upon him but because it is the thing to do. Since persons operate programs, willing adherence by individuals to ethical principles seems to hold the key to the solution of problems of conduct in many areas of human endeavor, including intercollegiate athletics. If the program of athletics does not adhere to ethical practices in a given college or university, it is probably because the wrong people are in charge.

ROLE OF PRESIDENT

Before the professional practitioner can cope successfully with the

crucial issues of athletics, however, he will need much help from many sources—particularly from the college president and the board of trustees, who are responsible for the over-all policy-making functions of the college. Because of the external pressures engendered by athletics, those in charge of this program find it extremely difficult to count on everyone concerned to hold the line once it has been cooperatively established. It is in strengthening the hand of the professional personnel in charge of athletics that the college president can wield his greatest influence.

From the very beginning of intercollegiate athletics, the college president has been tremendously concerned about his part in the program. In the early days he issued proclamations and posted rules prohibiting the playing of games on the campus, but these were of no avail. When he relied upon the faculty to throttle the athletic giant he met with only limited success. Neither has the athletic conference nor membership in such organizations as the NCAA entirely solved his problems. The college president presently finds himself harassed and sometimes severely castigated for his inability to solve the problems of intercollegiate athletics. Indeed, as most presidents will admit, they are subjected to the same pressures as the football coach. They can be, and sometimes are, summarily discharged for the same reasons the football coach is fired.

At mid-twentieth century, however, the college president cannot ignore intercollegiate athletics, even if he did inherit rather than create the problems in this field. Neither can he abolish the program by killing the patient in order to cure his ills. Indeed, if reform is to come in athletics at all, the college president must come to grips with the problems in the field and assume a role of leadership in their solution. To bolster his efforts in this crusade he will need the steadfast support of everyone connected with the college, including the board of trustees. After girding his loins for battle the president can then involve himself in the following matters:

He can be instrumental in crystallizing the philosophy and objectives of his own institution and in delineating the part intercollegiate athletics is to play in achieving these goals.

He can acquaint himself with the crucial issues in athletics and familiarize himself with the recommended principles and practices in the field. He can then set about to discover what is taking place in athletics in his own institution.

Once he has knowledge of what the situation is, he can then set the machinery in motion to make certain that athletics in his institution is controlled through the same channels as all other curricular areas of the college.

As the opportunities arise, he can recommend to the trustees for appointment only professionally qualified educators who are specialists in physical education, including athletics, and who meet the same standards of competence as other members of his faculty. The source of

such personnel is likely to be other educational institutions rather than the field of professional sports or business.

Moreover, since they are qualified educators, he can insist that these teachers (coaches) and administrators be accorded faculty rank consistent with their age, education, and experience, receive the same salaries, enjoy all the rights and privileges, and assume the same responsibilities as other members of the faculty. In addition, he can make the strict adherence to established educational principles a condition of employment, promotion, or retention in his institution.

He can insist that intercollegiate athletics be made an integral phase of the educational curriculum and its benefits extended to all students.

As a phase of the curriculum, he can then seek ways of financing the program of athletics in exactly the same manner that other aspects of the curriculum are financed — generally from appropriated funds, tuition, student fees, gifts, and endowments.

He can insist that the teachers (coaches) and other personnel connected with intercollegiate athletics be evaluated in terms of educational goals rather than on such commercial objectives as wins and losses, money taken in at the gate, or the amount of publicity accorded the teams and individuals representing his institution on the field of play.

He can give continuous surveillance to the program of athletics in his institution.

He can make certain that entrance requirements for all students are equal and see to it that athletes are neither favored nor discriminated against in meeting admission and retention requirements.

He can be instrumental in setting the qualifications and conditions pertaining to financial grants-in-aid and see that these are allocated to athletes, as well as to other students, through regular college channels.

He can make certain that athletes, along with other students, are enrolled in bona fide, educationally justifiable curricula, and in all other respects are treated the same as other students.

He can familiarize himself with the activities of personnel connected with the program of athletics in his institution and dissuade, by force if necessary, those ambitious individuals who believe that, given the opportunity — and the athletes — they can beat "State University" every Saturday afternoon in the year.

And finally, the president can make certain that a competent, full-fledged educator is appointed to administer the program of athletics in his institution. In making this appointment he can assure this person of the same academic status, confidence, trust, and cooperation accorded heads of departments in other areas of the curriculum. He can then hold him accountable for qualitative adherence to established principles and practices in the field of competitive sports and in education.

In all these matters, the president will find his burdens considerably lightened if his college is a participating member of a conference of institutions attacking these problems cooperatively. Preferably, these

conference members should be traditional rivals in the field of sports, hold to similar philosophies and practices, and be somewhat equal in such matters as size, financial worth, and scholarly accomplishments.

SIZE AS A FACTOR

The size of an institution enrollment-wise has little to do with the size of its athletic program. Some small colleges with inflated levels of aspiration conduct programs of athletics far larger than warranted by the number of students on the campus. Conversely, numerous institutions with enrollments numbering in the thousands conduct modest programs of intercollegiate athletics. It is distressing, but true, that the smaller colleges, athletically speaking, form the last frontier in the quest for a program of athletics that is consistent with and contributes to the goals of higher education. The larger institutions, athletics-wise, that traditionally have formed the spearhead of intercollegiate athletics in this country have long since passed the point where they can turn toward an educationally justifiable program of competitive sports. Even if they wished to do otherwise, they are now compelled to seek more rather than less power in athletics. Tremendous monetary commitments in facilities, equipment, and manpower are involved, to say nothing of conference-sanctioned commitments to bowl games and tie-ups with commercial television and radio interests.

The wooing of off-campus support of athletics has developed into a large measure of control by vested outside interests that have little or no concern for the goals of higher education, for those who administer the educational programs, or for the young people who play the games. Although a press agent type of justification may be made by spokesmen for the big athletic powers, little genuine concern is evidenced as to where all this fits into higher education, or what happens to the youth who are caught up in this maze of contradictions. Unfortunately, these practices have tended to set the pattern which is diligently aped—at the starvation level in most cases—by many small colleges of the country.

There is no earthly reason why colleges with modest athletic ambitions should not conduct programs of intercollegiate athletics that are educationally sound and justifiable. Most smaller colleges are relatively free from the aforementioned pressures; not by choice perhaps, but simply because few people seem to be interested in televising their contests, inviting them to participate in bowl or other post-season games, or in paying large sums at the gate to see their teams perform. These colleges, therefore, are in a better position to engage in serious soul-searching and programs of self-improvement than their more powerful brethren, athletically speaking, who, under faculty control and guidance it should be noted, have been caught up in the vicious cycle of so-called "big-time" athletics.

RESOURCES OUTSIDE THE COLLEGE

It is not too late for the smaller colleges to band together and determine to bring athletics into its own as a justifiable educational experience for college youth. These colleges can be anything they wish to be in athletics. As noted above, responsibility for the quality of the athletic program in any given college should be assumed by the professional practitioners in the field, the college president, and members of the board of trustees. There are, however, numerous avenues of assistance which may be relied upon to help the institution to help itself. One such source of aid is the National Association of Intercollegiate Athletics (NAIA). This organization concerns itself with the programs of more than 400 smaller and less prominent colleges in the field of competitive sports.

The NAIA can strike a blow for educational athletics if, through working conferences, it can formulate a philosophy consistent with that of higher education, develop principles, and formulate a set of objectives that are appropriate for and attainable by the colleges holding membership in the organization. Once these principles and goals are delineated and accepted by member institutions, then the NAIA might launch a program designed to help these colleges to achieve these goals at the local level. Since financial problems are at the base of all issues in intercollegiate athletics, the Association might engage in research designed to show how a satisfactory program of athletics can be conducted out of appropriated funds, thus relieving the program of the necessity of earning its way. If this could be accomplished, then it would be of no great moment who televised what game on any Saturday afternoon.

The NAIA might help personnel connected with athletics in its member institutions to place greater value on a type of professional education designed to equip them to be full-fledged college educators rather than sports technicians. If this were accomplished, then the Association might be instrumental in throwing the white light of unfavorable publicity on colleges that summarily dismiss their teachers (coaches) for other than good educational reasons. Indeed, in situations where the persons so involved has been accorded full faculty status and the program of athletics is sound from the standpoint of education and of physical education, the American Association of University Professors might find sufficient cause to exert its influence on the colleges in behalf of the aggrieved parties. Conversely, the NAIA might draw favorable attention to the educational values of participation in college sports, and bring to the attention of the public those colleges that organize and conduct their programs as an integral phase of the total educational curriculum.

Due to widespread publicity down through the years almost everyone in this country is familiar with the problems traditionally associated with intercollegiate athletics. Up to now no organization has been eminently successful in singling out the crucial issues in the field and doing something about them. This could be the role of the NAIA in the

years to come. Instead of attempting to walk alone, however, the NAIA should join hands with such on-going organizations as the athletic conferences with which member institutions are affiliated, the NCAA, the College Physical Education Association, the American Association for Health, Physical Education, and Recreation, and the appropriate regional and voluntary accrediting agencies. Thus, working together, these organizations can aid the colleges in their attempts to make athletics an indispensable factor in creating a fuller and richer life for students and a stronger and freer democracy for everyone.

FLAG FOOTBALL IN THE INTRAMURAL PROGRAM

Robert Korsgaard
Ball State Teachers College

What is flag football?

Flag football is a modification of regulation football. The essential difference lies in the method of "tackling" the ball carrier. Each player carries a "flag" (a piece of cloth, preferably denim, six inches wide and twenty inches long) tucked in his pants, at the hips, so that a minimum of fourteen inches of cloth is exposed. The "tackle" is made by pulling one of the flags from the pants of the ball carrier. The game may be played on a regulation field or a smaller field if conditions demand. There are seven men to a team and the basic rules of football as prescribed by the N.C.A.A. or the National Federation of State High School Athletic Associations are employed. Because of its close similarities to the regulation game of tackle football the game has been found to satisfy the desires of youngsters to play football but who are inhibited from playing the tackle game because of a lack of the desired and needed paddings.

What are the virtues of the game?

Boys want to play regulation football, and at the elementary level at least, the modified game, called touch football, has not seemed to meet their needs or interests to a satisfactory degree. If the true test of learning is whether one's behavior and attitudes have changed and whether one uses the knowledges learned in class to carry over to his out-of-school participation the teacher finds that too often his instruction has not resulted in true learning. The boys obediently play touch football in class, but after school and on Saturdays when no teacher supervision exists, the red-blooded American youth wants to play "tackle", and he does, with the resultant high injury incidence so well known to all. After a thorough process of teaching certain basic fundamentals, teaching the necessary rules, and playing the game of flag football, with an insistence on the rigid enforcement of the rules, it was found that boys were no longer demanding to play tackle in class, after class, or on Saturdays. The boys were actually playing flag football on their own. Apparently the game has real appeal and a satisfying level of learning had occurred. The carry-over objective had also been met.

Flag football provides for a realistic opportunity for all team members to be real contributing and participating players. Frequently in touch football the game degenerates to probably ninety percent of the play involving only a passer and one or two pass receivers. The remaining players are permitted on the field as line-men, blockers, or

ball snappers, but their relative values are questionable. In flag football it has been found that every boy has a functional role just as in regulation football.

Flag football includes many running, as well as some pass plays. In touch football possibly as high as ninety percent of the plays are pass plays. This does not resemble football but is more akin to speedball or flickerball. The successful teams in flag football are those who have struck a balance between their pass plays and running plays just as in regulation football. Running plays do have a real chance for success and the players soon discover this. The ball runner is as important as the passer. Blocking in the line really pays off and the lineman is of real consequence.

The substitution for the regulation tackle has always been a basic cause for dissatisfaction and source of irritation for modified football games. In touch football there is the constant dispute, bickering, temper flare-up and other unpleasanties over the touch. Was the ball runner touched or not? He didn't feel it and no one can prove whether or not he was touched. The tackler, frustrated because his touch wasn't felt, resorts then to either a hard slap or vigorous push the next time so that there can be no doubt in anyone's mind about the touch. The resounding slap heard all over the field doesn't feel good, the actual smarting or pain of the touch, or the ball carrier pushed so hard that he sprawls (oftimes injured) to the ground do not enhance the rapport and sportsmanship between players. Revenge or a fight may be in the offing.

The two hand touch was offered as the solution to the deficiencies of the one hand touch. However the problem was not alleviated. Was the ball runner touched with only one hand or did he get touched with both? The tackler was also given the opportunity to exert more force since one can shove harder with two hands than he can with one. No, the two handed touch is not an adequate answer.

In contrast, in flag football one merely has to pull the flag out and there can be no dispute about whether one was tackled or not. A boy running down the field without a flag on his hip is mute and positive evidence that he has been tackled. And, the exact location of the tackle is usually fairly definitely established. In the first place it is relatively easy to see the flag being pulled out. Also, second nature seems to cause the tackler either to stand on the spot as soon as he pulls the runner's flag, or he often pulls the flag and immediately drops it to the ground, indicating the spot of the tackle.

It has been discovered that if the boys have been taught certain basic fundamentals and developed an attitude of playing by the rules the game obviated the need for an official. This certainly is an ideal to be sought in all of our sports.

College students who had just learned flag football, in comparing it with touch football have commented:

"More interesting."

"More challenging."

"Closer to the real game. More skills needed."

"Develops more football skills than touch does." (Boys who come to college without a tackle football background have successfully played college varsity football.)

"Teaches appreciation of the real game."

"Less arguments than touch football." (Particularly with reference to the touching of the ball carrier.)

"Good lead-up game to regulation football."

"Develops team play."

"Better opportunities for running plays."

"More exciting."

"Easier to determine the exact spot the man is downed."

"Faster because of less passing."

The game is appealing to the boy who loves contact sports such as football. The resemblance of this game to tackle football is recognized and appreciated by the players.

What of the danger and injury incidence?

The college health service director at Ball State Teachers College, Muncie, Indiana, the intramural director and class instructors agree that flag football apparently is no more dangerous or injurious to the players than is touch. There is a feeling that it may even be safer as far as the number and extent of injuries are concerned. No exact statistics have been compiled on this matter, however. Some of the types of injuries that have occurred are: broken bones of the nose, several concussions, ankle sprains, abrasions, and knee injuries. Very few of the injured required hospitalization and most injuries were not classified as being of an extremely serious nature. In terms of the number of players concerned the game does not cause as many injuries as the varsity (tackle) brand of football. It has been agreed by the health service director and others in charge of the game that there does seem to be an almost direct ratio between the number of injuries during a season and the quality of the officiating of intramural games. If the rules are enforced the injury incidence is decreased considerably.

Has the sport grown?

The first full season of flag football locally was started at Burriss School, the laboratory school for Ball State Teachers College, in 1947. There is no known evidence that other Indiana schools had played it prior to that date. In 1948 it was introduced to the college and became an intramural sport in the intramural program, replacing touch, in 1950. The college intramural program now includes from fifteen to eighteen teams annually. The teams are divided into leagues and each plays a round robin tournament which is climaxed by a double elimination tournament. When the game was in its early years at the college most of the boys had never played it before but enthusiastically accepted it. The comment, "This is fun! Better than touch!" was frequently heard. Now, many students come to the college with a flag football background and its complete acceptance is indicated by the lack of heard comparisons with touch.

The intramural director has remarked that there are very few protested games--only one protest during the season just past.

The entire school system of Muncie, Indiana uses flag football and has an annual inter-school flag football schedule as heated and full of rivalry as one would want. Most of the county schools have adopted it and there is evidence that it is gradually being accepted in other sections of the state of Indiana.

A survey made last winter of 61 colleges and universities of the mid-west, central and southwest states and California indicated that twelve institutions offer courses in flag football and eight include it in their intramural program.^{1/} Contrast this with twenty other institutions which offer touch football in their courses but only two include it in their intramural program!

No less a football power than Massillon, Ohio utilizes the game in its public schools and perhaps this may be one contributing factor for the success of Massillon High.

The game seems to be, and deserves to be growing.

Are there flaws to the game?

In fairness it must be admitted that there does seem to be two unsolved problems about the game. Although stiff-arming is illegal, some ball carriers have a tendency to put a hand out with some stiff-arming intent. Some ball runners swing their free arm past their hip which serves to somewhat protect the flag on that hip thus making it unduly difficult for the tackler to get at the flag. The second unsolved problem is the tackler who actually puts his arms around the ball runner, thus impeding his progress and actually making a semi-tackle before making or during the attempt to grab the flag. This action is illegal and penalized severely (fifteen yards from the spot of the foul and an automatic first down) but it still persists as a problem.

Conclusion

Despite its relatively minor imperfections the game is highly commended for class and intramural use. Ball State College is enthusiastic about the game and feels that others will share its enthusiasm if they would include it in their programs. Perhaps the College Physical Education Association would do well to consider this game for further study and committees such as the Intramural Sports Committee, The National College Touch Football Rules Committee and the Required Service Program Committee might find their energies well directed and rewarded in the cause of flag football.

^{1/} Paul B. Williams, Unpublished study, "School Survey." Ball State Teachers College. 1956.

IMPLEMENTATION OF THE WASHINGTON INTRAMURAL CONFERENCE

Paul V. Keen
University of Oklahoma

The Washington Conference on Intramural Sports was held on October 30 to November 2, 1955 with approximately 110 delegates attending the conference from all parts of the United States, divided about equally between men and women.

The Implementation Committee was appointed with three representatives each from AAHPER, NAPECW and CPEA.

The members of this committee and the group they represent are:

M. M. Mackenzie - AAHPER - Air Force Academy - Denver, Colorado; Dorothy Wirthwein - NAPECW - Ohio State University - Columbus; Paul V. Keen - University of Oklahoma - Norman; Rodney Grambeau - CPEA - University of Michigan - Ann Arbor; Katherine Ley - NAPECW - University of Colorado - Boulder; Mabel Locke - AAHPER - University of Idaho - Moscow; Joannette Masilionis - NAPECW - State Teachers College - Fredonia, New York; Spurgeon Cherry - CPEA - University of Florida - Gainesville; Harris Beeman - CPEA - Michigan State University - East Lansing

The principal aim of this committee is to see that the materials and ideas of the Washington Conference are made known to the schools' personnel who were not present so they could have the benefit of the group thinking of those who were present.

This committee met in Chicago and suggested a number of ways that this information could be presented.

The feeling was that the first thing that should be done was for each delegate to go back to his own campus and discuss the whole conference with all the co-ordinating or interested groups there. He was to try to evaluate the program on his campus in keeping with the suggested appraisal of Intramurals in colleges and universities. The aim was to get both departments of Physical Education and Intramurals, the Student Union, Health Education, YMCA, YWCA and any other organization on the campus that deals with recreation to send representatives to a meeting where the aims and objectives of the total school program can be discussed and co-ordinated.

The president of each school should be given a copy of the report and also an appraisal of how well his own school measures up to the national standards.

At state meetings, a place should be asked for on the program to explain the conference report and be prepared to discuss the items and compare differences.

A report should be made to the institutional faculty meeting.

Television and radio programs on intramurals should be planned and used.

Articles on intramurals should be available for local papers and national publications, especially educational periodicals.

In fact, any time you can enlighten the public about the Intramural program and its objectives, I think you are doing yourself and them a real service.

REPORT OF THE NATIONAL COLLEGE TOUCH FOOTBALL COMMITTEE - 1956

Rodney J. Grambeau
University of Michigan

A complete progress report of the history and background of the National College Touch Football Rules Committee was presented to the Intramural Section of the College Physical Education Association last year by A. H. Rhoads, chairman and editor of this committee since its inception in December, 1950. The following recommendations were made by Mr. Rhoads:

1. The appointment of a new Chairman and Editor for 1956.
2. The retainment or appointment of committees and sub-committees on a sectional basis.
3. Empower the Chairman and Editor and the Committee with the responsibility of revising the present National Touch Football Rules Handbook and the responsibility for its publication and distribution in sufficient time for the 1956 season on a non-profit basis.

In accordance with the recommendations above, Howard Ryan, Chairman of the 1956 Intramural Section, appointed Rodney J. Grambeau, University of Michigan, as Chairman and Editor.

In this capacity the new chairman has contacted the various members of the committee and sub-committee concerning their continued interest in serving in this capacity. Returns from this have been very successful with the following changes being made thus far:

Jack Rhoads, Ohio University, Secretary; Pat Mueller, University of Minnesota, Prevention of Injuries; Bill Scheerer, Wofford College, Editorial; Ellis Mandelsohn, University of Louisville, Facilities and Equipment

One of the recommendations of the outgoing chairman was that the new chairman be empowered with the responsibility of revising the present handbook for publication and distribution as in the past. Inasmuch as the complete supply of handbooks which had been previously printed was exhausted, immediate action was necessary; however, a joint effort of revision is not something that can be done within a few months. It was necessary to inform Mr. Ted Bank of the Athletic Institute by July as to what we intended to do so that he could take the necessary action concerning the revision.

After discussing the problem with a number of people, it was decided that enough copies of the present handbook should be reprinted with just a few minor changes to last for a two year period. This would give the committee a period of two years to make the necessary revisions. Mr. Ernest Smith, President of the CPEA was contacted. Following is an excerpt from a letter to him.

"I am writing you for your approval of the following:

To publish the National College Touch Football Rules Handbook the same as it has been published in the past with enough copies being printed to last for a two year period. At the conclusion of that time a revised copy will be published which I, with the help of the Committee, will have had the opportunity to work on during the two year interim period.

I have discussed this with Ted Banks, President of the Athletic Institute, and he is in favor of the plan. With your approval I will write him, including the name changes in the Rules Committee, and instruct him to go ahead with the printing".

Approval was received for the above and Mr. Banks was notified, resulting in the reprinting of 1000 copies with a few minor editorial changes and the aforementioned committee changes.

Approval was also requested and received from Mr. Smith for having complimentary copies of the reprinted rules sent to all members of the committee, with the cost involved deducted from the profits of the sale of the rules books.

Committee members have been contacted concerning the revision. A meeting is planned for this year's convention, and it is hoped that at this time next year a tentative revision can be presented to the Association. It should be noted that copies of the handbook are available through the Athletic Institute, 209 South State Street, Chicago 4, Illinois. The price is fifty cents per copy with a 20% reduction when ordered in quantities.

The Chairman and Editor of the National Touch Football Rules wishes to express his appreciation and thanks to the officers of the College Physical Education Association and to the rules committee members for their cooperation and assistance in the continuance of this important project.

Respectfully submitted,

Rodney J. Grambeau
Chairman, National College
Touch Football Rules Committee

COMMITTEE ON PROBLEMS OF COLLEGE PHYSICAL EDUCATION Interpretations and Objectives

Karl C. H. Oermann
University of Pittsburgh

The objectives of a particular profession may change for several valid reasons but certainly increased numbers of people taking advantage of the services of a profession would not be one of them. However, the interpretation of objectives to an increased consumer public places an additional responsibility upon a profession for making certain that its purposes and its outcomes are fully understood. For the most part, we would be forced to admit that we have done a poor job of interpretation to the student body and to the lay public at large. It, therefore, is most important and appropriate that we take advantage of every new and every timely possibility at our disposal for calling attention to physical education. Such a means has been made available through the recent attention given to Youth Fitness. As a result of President Eisenhower's Conferences and the attendant publicity given to this matter in the press, radio and television, a vast new audience has been made available to us. Let us not fail to interpret our profession to this group. A refreshing restatement of our objectives appeared in the December 1956 issue of the *Journal of Health and Physical Education*. They are repeated in this report for the purpose of once more calling to our attention the direction of our efforts.

Fitness is that state which characterizes the degree to which the person is able to function. Fitness is an individual matter. It implies the ability of each person to live most effectively within his potentialities. Ability to function depends upon the physical, mental, emotional, social and spiritual components of fitness, all of which are related to each other and are mutually interdependent.

This means that each person, in order to satisfy his own needs and, at the same time, contribute his share to the welfare of society must possess:

1. Optimum organic health consistent with heredity and the application of present health knowledge;
2. Sufficient coordination, strength, and vitality to meet emergencies, as well as the requirements of daily living;
3. Emotional stability to meet the stresses and strains of modern life;
4. Social consciousness and adaptability with respect to the requirements of group living;
5. Sufficient knowledge and insight to make suitable decisions

- and arrive at feasible solutions to problems;
6. Attitudes, values, and skills which stimulate satisfactory participation in a full range of daily activities;
 7. Spiritual and moral qualities which contribute the fullest measure of living in a democratic society.

Two statements issued before the Council on Youth Fitness was established but which are equally important means for interpreting physical education are:

1. "College Physical Education for Peace and Defense - A Statement for College Administrators" which was prepared by the College Committee on Physical Education and Athletics in 1949 and endorsed by the National Collegiate Athletic Association, the College Physical Education Association and the American Association for Health, Physical Education and Recreation.
2. Physical Education - An Interpretation for Superintendents, Supervisors, Principals, Directors of Physical Education, Teachers and Parents which was published by the American Association for Health, Physical Education and Recreation in 1952 through the efforts of a joint committee of Association members and members of the Society of State Directors of Health, Physical Education and Recreation.

The problem of communication will no doubt be emphasized in the public relations report of this committee. However, it would appear to this member of the Problems Committee that we have, as a profession, had many excellent opportunities during the past ten years to interpret our program. It may well be that through the tremendous increase in college enrollments which is anticipated in the next decade and the current general interest in physical fitness that the profession of physical education is now on the threshold of an opportunity for interpretation unsurpassed in history. If we "miss the boat" on this occasion and thus propagate another generation of uninformed citizens and tax payers, we may be sounding the death knell for organized public and privately supported programs of physical education as we know them in most schools and colleges today.

MEASUREMENT AND EVALUATION CREATED IN INSTITUTIONS OF HIGHER EDUCATION BY INCREASED ENROLLMENTS OVER THE NEXT TEN YEARS

Benjamin H. Massey
University of Maryland

In this discussion, for the sake of clarity, measurement is defined as that process whereby the extent or amount of something is determined, using as a frame of reference known units such as feet, pounds, seconds or the number of test items correctly answered. Evaluation is defined as that mental process whereby information concerning a situation is reviewed and a value assigned. Evaluation is the natural sequel to measurement and gives significance to it.

During the next ten years, physical educators will be confronted with many problems resulting directly from the great influx of students to college campuses. The problems arising will not necessarily be new problems, although there may be a number of these. But rather, the problems will be the same old ones in a much more acute form. Keeping facilities in line with increasing enrollments, maintaining reasonable teacher-pupil ratios, the marking of students in classes, the classification of students for activity and the excusing of students from the required program on the basis of demonstrated proficiencies, are examples of the kinds of problems that will be encountered.

Also, during the coming period, every phase of higher education will be carefully evaluated. The evaluation will be in terms of cost as related to importance. Those programs which cannot, or do not, demonstrate their worthiness, will be markedly curtailed and possibly dropped entirely from the curriculum. Physical education along with all other areas of education will be closely scrutinized. In fact, there is evidence that this process has already begun in certain institutions.

The progress of physical education in the coming years and the degree to which it contributes to the total education of the college student will depend upon how well physical educators can support their cause in the eyes of school administrators and how well they can cope with problems as they arise.

The solution of any problem depends, in large measure, upon the availability of accurate information and the ability to critically analyze the data. In other words, measurement and evaluation are basic to the solution of problems. Unfortunately, at the present time, measurement and evaluation are obscure arts to most physical educators, and this includes those teaching in institutions of higher education. There are several reasons for this situation. The rapid expansion in the number of schools offering degrees with a major in physical education, the recency

of measurement as a requirement in even the best curricula, and the dearth of qualified persons to teach measurement, are a few of the reasons. But irrespective of the cause of this situation, it is important that something be done about it. Effective measurement and evaluation depend upon the availability of qualified personnel. Thus, the most urgent problem with respect to measurement and evaluation confronting the profession is now to instill into persons who will be in higher education, an appreciation of the necessity for measurement, the skill of measuring efficiently and wisely, and the ability to critically analyze and evaluate data.

The solution to this problem probably rests with those persons responsible for the professional training curricula in institutions of higher education. If these institutions will graduate only mentally capable, well-trained personnel who have, at least, a minimum degree of competency in measurement, the battle will be half won. Certainly, many of the problems which otherwise would confound us can easily be solved. Classes in physical education will be better taught and more information showing the effectiveness of our program will be forthcoming.

The crux of the matter is how can those who are responsible for the professional training programs more adequately prepare the prospective teacher in terms of measurement. The following are a few proposals for accomplishing this:

- (1) All schools must require that their graduates take a minimum of one basic three-hour course in measurement and preferably two such courses. Many schools have a three-hour course requirement, but there are still some which graduate students with no training in this area.

- (2) The measurement course must be closely allied with teaching methods. For much too long, measurement has been identified with research, resulting in an hybridization of both.

- (3) The measurement course should deal with fundamental measurement statistics, the basic principles of selecting and constructing tests, practice in the use of practical measurement tools useful in the teaching situation, and a review of the tests which can serve as an aid in teaching sports skills and developing physical fitness. More refined tests, those used in research and those applicable to the more peripheral objectives of physical education, such as social adjustment, should be deferred to an advanced course.

- (4) The measurement course should be taught only by persons qualified to teach measurement. This means that the course ought not to be placed in the hands of just anyone, in order to fill out a course load, or that it should be handed to the research oriented faculty member because he knows a little statistics. A qualified person is one who understands measurement and who understands teaching methods, and is capable of helping the student to integrate the two.

(5) All physical education majors, as a requirement for graduation and before taking a course in measurement, should be required to demonstrate a proficiency in basic mathematics. The proficiency level should be equivalent to that expected of persons completing six hours of basic college mathematics, including algebra. Measurement involves the use of numbers, an understanding of the theory of numbers and the ability to handle basic algebraic manipulations. A fundamental knowledge of mathematics is not too much to expect when one realizes that many physical education degrees carry the title Bachelor of Science. Even pre-law and pre-divinity students who obtain the Bachelor of Arts degree are frequently required to take at least six credit hours of mathematics on the college level. Currently, few schools require such a competency of their physical education majors. A survey by the author of what he considered eighteen of the better schools offering degrees in physical education revealed that only four required any work in mathematics. A sad commentary indeed, and one which explains why physical educators as a group shy away from measurement.

(6) The physical education profession should develop experts in measurement just as the psychologists have done. At present, much of the frontier work in measurement has to be done by persons interested in other phases of research. The profession has few persons who center their whole attention upon measurement and can be considered experts. Many more are needed. Administrators and those responsible for professional training curricula should encourage young men to specialize in this area of work.

Undoubtedly, there are many other suggestions which could be made pertinent to improving the measurement situation in general, and the skill and appreciation of teachers with respect to measurement and evaluation in particular. It is believed, however, that observance of the few suggestions made above will aid materially in supplying the profession with personnel capable of efficiently using the measurement and evaluation as educational tools. Such personnel will become increasingly important as greater demands are placed upon the various phases of the program. It is not hard to envision that in the days to come the ability to present to a college or university administration information carefully collected and evaluated, might well be the determining factor in the survival or collapse of a program. Measurement and evaluation, in their broadest sense, are potentially powerful tools for aiding the physical educator to meet the problems that will confront him with ever increasing enrollments.

PROBLEMS OF THE PHYSICAL EDUCATION SERVICE PROGRAM

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In the next ten years colleges and universities must be prepared to handle an avalanche of students. The predictions are that by 1965 our enrollments will be doubled. There is little reason to question the predictions because the children are already in our elementary schools. Undoubtedly, more collegiate institutions will come into being, particularly junior colleges. Some institutions will control their enrollments by raising entrance requirements. Various factors, such as military service, may affect our enrollments. However, despite these considerations we are going to be inundated by a tidal wave of students. Fundamentally, our problem in physical education is: How can we handle twice the volume of students which we had in 1956?

Facilities.

The first and most urgent problem which comes to mind in trying to answer the question is the matter of facilities. Few institutions could carry on their present program for a doubled student body with their present facilities. Most departments are overcrowded now. Even if maximum use were obtained from existing facilities the load still could not be absorbed. Where will the additional teaching stations come from?

An obvious answer is to acquire additional facilities. This is easier said than done. Colleges and universities will need additional facilities in all the areas. Money will be inadequate to meet all the needs. Physical education is not accorded a priority in most institutions when it is competing with new science and classroom buildings, dormitories, offices, and additions to the library, administration building and physical plant. To get the dollars for new teaching stations physical education will have to stand in line — and in most schools it will be at or near the end of the line. Some schools will be able to expand their physical education facilities but to anticipate that colleges and universities will double their indoor and outdoor facilities would be completely unrealistic. As a matter of fact, many schools are so crowded for space right now that even if funds were available they would be unable to increase their teaching stations.

If the increase in enrollment is not accompanied by a proportionate increase in facilities something must give. The only thing which can give is the program. Modifications in our service programs are inevitable. Some of these will be:

1. Reduction in the physical education requirement. This possibility is a simple, but — to physical educators — an abhorrent solution. It will be strenuously resisted but some administrations and facilities will force it. This reduction of requirement may be in terms of years (for example, from two years to one) or in terms of hours per week.
2. Maximum use of facilities. This can be done in a variety of ways. The size of classes can be increased. Sections can be scheduled at 7:00 A.M., 12 noon, 4:00 and 5:00 P.M. and perhaps after dinner. The use of facilities for service necessitates other arrangements for intramurals and varsity practices. More use will be made of Saturdays.
3. Greater use of non-departmental facilities. While it is advantageous to use departmental facilities there is nothing sacred about it. Municipal facilities for golf, tennis, and swimming may be rented or borrowed. Commercial bowling alleys and swimming pools may be used. Social agencies have facilities which might be leased. Many colleges are currently taking classes to ski areas, and lakes and rivers. Student unions are providing increasing facilities for physical education activities which can be used for teaching stations.
4. Greater use of proficiency examinations. When we have more students than we can adequately handle it is wise to concentrate on those who have the greatest need for physical education. If students can pass an achievement examination at the standard normally expected of students at the end of a service course why should they be forced to take the course — even if our facilities are not overcrowded? At some institutions now, students may have their entire service course requirement waived by passing enough proficiency tests.
5. Substitution of intramural or recreational participation for part of the requirement. Some schools are currently employing this procedure. A class which formerly met three times per week is scheduled for two periods with the requirement that students engage in some form of intramural or recreational athletics outside of class. Evidence of such participation must be presented. In this connection there will be more disposition to give credit for participation in intercollegiate athletics. In many institutions at present varsity and freshmen athletes are held for the full service course requirement. This would be a logical move in a seriously overcrowded situation.
6. Greater use of orientation courses. Some colleges and universities use one term of the required program to provide an orientation course. This is conducted as an academic course throughout. As such it reduces the load on the activity teaching stations. This course covers the aims and purposes of physical education, history and significance of sports, how to remain fit, physiology of exercise, and the like.

7. Restriction of service courses to students fulfilling requirement. In many colleges and universities a considerable enrollment in the service courses is by upper classmen who have completed the requirement. Usually elective credit toward graduation is granted to such students. However, priority should be given to those who haven't met the requirement in the event of inadequate facilities.

Staff.

As a consequence of increased enrollments in the next ten years physical education will also suffer a critical shortage of teachers. It has been estimated that higher education will require 500,000 new college teachers by 1970 if present faculty-student ratios were to be maintained. If enrollment doubles in the next ten years we shall require in physical education twice as many staff members as we now have.

If funds were available and the staff could be obtained this problem could be readily solved. However, both these conditions will not pertain. With the cost of higher education mounting by leaps and bounds it will not be possible in many institutions to double the cost of instruction. In other words, present faculty-student ratios will not be maintained.

The growing shortage of good college teachers is both a challenge and opportunity for the profession to use available teaching resources more effectively. Some ways in which the additional load might be handled are:

1. Make greater use of graduate assistants. This is already being done to a considerable extent in a number of larger universities. In schools with graduate programs in physical education the use of well-selected graduate students will go a long way toward solving the staffing problem. While a graduate student will not prove as effective a teacher as a regular staff member we may not be able to make the choice. There are procedures which, if followed, will obtain satisfactory service from graduate assistants.
2. Increase the size of classes. In many institutions a lid is put on the enrollment in service classes. This will undoubtedly be changed. There is no question but what an instructor can do a better job in a golf class of 20 students than he can with 30 students. How much a difference we don't know but we are going to be forced to do a lot of things we would prefer not to do.

A factor which may help instructors handle larger sections is student help. Outstanding senior physical education majors can be of invaluable assistance in alleviating the staffing problem. Non-majors who have had extensive experience in a particular activity could help in the same way. It is not suggested that these students be given the sole responsibility for a service course, but rather that they serve as an assistant to the instructor. In this way he is enabled to handle larger classes than if he were alone.

3. Relief of staff members from non-instructional duties. All staff members have other assignments in addition to their instructional duties. There is a real possibility of relieving them of some of these non-teaching duties. They may be relieved of committee assignments, advisory duties and other semi-administrative jobs. It is possible to get some of these matters taken care of by student assistants and the clerical staff. In this way staff members might be freed to teach an additional service course.
4. Place a larger responsibility on the student for his own learning. This has already been suggested by having the student spend part of his service course periods in intramurals or in recreational activities. For example, if a class which ordinarily met three times per week met only twice with the stipulation that all students were to present evidence of outside participation the faculty teaching load could be increased.
5. Cancelling sections with small enrollments. Many service courses are taught even though they are only half-filled. With pressure on the teaching staff this practice will be discontinued.

At the present time a great deal of research is being done in regard to extending the teacher's services through television. This will undoubtedly come into general use in academic classes although it is difficult to see how it will alleviate our problem with physical education service classes. However, if it could be effectively used in the required health education service course it would lighten the teaching load in many departments which have this responsibility.

Conclusion.

Physical education must prepare for a more rigid assessment of its place in an institution of higher learning than it has ever had before. As we are confronted with the great expansion in the years ahead with all of the financial, space, and curricular pressures involved we must rid ourselves of many vestiges of an outmoded philosophy. Unless physical education can justify its existence in terms of significant educational experiences it cannot survive in the future.

THE PROBLEM OF ATHLETICS (Program)

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Athletics may be a part of a physical education program or they may be on an intercollegiate basis. In this paper, I shall consider athletics in the intercollegiate pattern. The problems involved in the intercollegiate athletic program have a wide range due to many factors. In many of our small colleges, athletics are closely associated with physical education and may be a part of the total college physical education program. However, in most of the large colleges and universities, intercollegiate athletics are separate from all other departments and are an independent and distinct budgetary operation. In these situations, physical education may disown and disclaim any kinship or relationship with the athletic program, or physical education can claim family ties and strive to assist in the solution of the problems which beset intercollegiate athletics. The problems will affect physical education regardless of which of the above approaches is maintained.

Let us consider a few of the most important problems associated with the program of intercollegiate athletics. Tremendous alumni and public interest and support for intercollegiate athletics is responsible for the growth of athletics into a gigantic financial enterprise. This commercial flavor of big business is probably the root of most of the problems in intercollegiate athletic programs today. The interest in and the demand for winning teams have had a serious impact upon collegiate athletic programs and have created a high pressure recruiting situation which is responsible for many of the problems. The demand for a winning team frequently places "winning" upon an unnaturally high plane to the detriment of basic values in athletic competition. Many alumni and supporters consider "winning" as the most important objective, and a nationally prominent coach was quoted in a metropolitan newspaper recently as saying that "Winning was not the most important objective in football -- it was the only objective." The devastating desire to have a winning team at any cost is practically certain to result in dishonest practices in the recruiting of athletes.

The practice of aid to student-athletes has been in existence for many years. In the beginning it was on a small and strictly legitimate basis; someone finding a bona fide part-time job for a bona fide student. I need not trace the development of this practice through all types of alumni booster clubs and the like to the present-day situation. It is my opinion that a large majority of the alumni, friends and supporters of state colleges and universities believe that financial assistance should be given to bona fide students who participate in athletics. This financial

assistance obviously should be under the complete control of the institution. However, present rules prohibit the awarding of a grant-in-aid for institutional expenses to a student because of athletic ability. This could be awarded to a student for his music ability, and the grant-in-aid could be awarded for participating in the marching band. If a financial award be made to a student to play football, for example, this makes the student a professional. This "amateur rule" does not seem to be practical in today's intercollegiate athletic picture and causes all sorts of unwholesome and dishonest practices to circumvent the rule. Assistance is often handled by alumni in an "under the table" manner without any apparent participation by institution authorities. Another practice is that of giving a job to an athlete whereby he can earn sufficient money to pay all institutional expenses. In this case, since the student-athlete has a regular job, he is not being paid to participate in athletics and is not in violation of the amateur rule. Of course, it is generally known by all persons concerned that the student is not expected to work all of the hours which would be required at the given rate to earn the stipulated sum per month. Since the student is not being paid for athletics, he can be dismissed from his job without a violation of the rules upon the part of the college.

Many conferences in the United States approve the awarding of athletic grants-in-aid for institutional expenses and no "phony" job are required of the recipients. Of course, these grants-in-aid must be handled by the school and awarded by the regular scholarship awarding committee and cannot be awarded for athletic ability or performance alone. The criteria for determining "pay for participation" are:

- a. Gradation or cancellation of institutional aid during the period of its award on the basis of a student-athlete's prowess or his contribution to a team's success.
- b. Gradation or cancellation of institutional aid during the period of its award because of an injury which prevents the recipient from participating in athletics.
- c. Gradation or cancellation of institutional aid during the period of its award because of a student-athlete's decision not to participate in athletics.

The grant-in-aid plan seems to be the best plan from the standpoint of honesty; however, it is far from the best solution to the problem.

If intercollegiate athletics are to survive and continue to be a wholesome influence in college and university education, there must soon be established a universal policy which is absolutely honest. There are two possible courses:

1. The Ivy League Plan or something similar.
2. A revision of the amateur code to make it possible for an institution to give an athletic grant-in-aid to a bona fide student who can meet all academic requirements. This grant-in-aid would be given for participation in athletics and would include only institutional expenses. The re-

quirements for the continuation of the aid would be academic standing and progress, and the student would naturally be required to try out for the sport and do his best in the activity.

I realize that there are many strong arguments against making it legal to give athletic grants-in-aid. However, it is an honest approach to the problem, and a straightforward recognition of what all colleges and universities in major conferences are now doing under a cloud of suspicion and dubious practices.

Members of the College Physical Education Association must recognize athletics as part of the basic substance of physical education. Intercollegiate athletics have grown beyond our bounds and much good and some bad have resulted. As the programs increase, the good and the bad results will continue to be with us. In colleges where no organized attempt is made to induce athletes to enter, there is probably no serious problem except the universal one of providing adequate facilities and staff to meet the rising tide of students. In colleges and universities which do not have a professional preparation program in physical education, the problems aforesaid mentioned may not affect the physical education department any more than other university departments. Schools with major programs of physical education have the greatest concern with the problems associated with intercollegiate athletics because many athletes major in physical education. The varsity athletes are constantly exposed to powerful influences within the varsity athletic program, and if the program is unsound the effect will be transplanted through the student majors into high school programs.

It seems to me that our course is to recognize the place of athletics in physical education and to acknowledge our kinship with the intercollegiate programs. We should hold to basic values, but be willing to cooperate with athletic coaches in the solution of the problems of intercollegiate athletics. It is decidedly to our advantage that all evils be removed from the programs, and that they be an integral part of the educational operations of colleges and universities. Intercollegiate athletics are an important part of college and university life in the United States. They are deeply embedded in American culture and will undoubtedly be with us always. The College Physical Education Association should take a realistic, sympathetic and cooperative approach to the problems as well as to the benefits in the programs. Perhaps there is little we can do, and I know at times it is very discouraging; but I am convinced that we must try and continue to exert our efforts toward good programs in athletics as well as in physical education. In regard to these programs, I suggest that we adopt John Wesley's rule:

"To do all the good we can
By all the means we can
In all the ways we can
In all the places we can
At all the times we can
To all the people we can
As long as ever we can."

PROBLEMS DURING THE NEXT DECADE - ORGANIZATION AND STAFF

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1. How can departments of physical education help each other through improvement of relations with placement agencies in their respective settings?
2. What responsibilities of candidates, employers, departments of physical education, and placement agencies need clarification and general acceptance?
3. As colleges make personnel additions earlier each year due to competition for staff members, how can needs best be projected well in advance?
4. How can colleges compete with other demands for manpower? What social issues are involved?
5. How can colleges with low salary scales recruit and retain promising staff members?
6. How can faculty members be used in the selection of staff members to insure the maintenance of high morale?
7. What procedures are most effective in the orientation of new staff members? In their in-service improvement?
8. What steps should be taken to improve the selection of graduate students and to speed their professional preparation for college instruction?
9. How can teaching assistants and research assistants be used most effectively?
10. How can men's and women's divisions of physical education be integrated where they function separately?
11. What is the most satisfactory student-faculty ratio and how can it be maintained?
12. What is a reasonable load for the college teacher? What weight should

be given to various class teaching assignments, coaching, guidance and counseling of students, committee service, and administrative assignments?

13. How can production and publication of research be stimulated as loads of staff members increase? Other contributions to professional literature?
14. Should criteria for promotion be changed as class enrollments and the time required for instruction increase?
15. How are travel funds (often too limited already) to be allocated in fairness to all staff members?
16. What staff adjustments will be necessary as efforts are increased to conserve campus space and to provide for large enrollments -
 - a. Through centralized scheduling?
 - b. Through scheduling double periods?
 - c. Through scheduling of more Saturday classes?
17. What would be the impact upon staff morale if physical education requirements for the general college students were eliminated or curtailed due to lack of adequate facilities?

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MANAGEMENT AND SUPERVISION PROBLEMS DUE TO INCREASED ENROLLMENTS

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Since no less than four sub-topics of the Problems Committee are concerned with Administration, it is impossible to discuss Management and Supervision problems caused by increased enrollments apart from the other three sub-topics dealing with staff, facilities and legal problems. Supervision is concerned with all these aspects of administration. Generally speaking, present problems of supervision will be intensified by increased enrollments.

The need for qualified staff members, for example, which is already acute will become increasingly so. The five million additional pupils in elementary schools during the decade, 1945 to 1955, has now reached the lower classes of the high school. On the college level the number of 18-21-year-olds in the population has been going down at the rate of 10,000 per year for the past ten years. This should place college enrollments at a new ten-year low but instead they are at an all-time high* and obviously they are going much higher. This new surge should produce a larger annual group of newly qualified teachers. But, unfortunately, it doesn't and for the following reasons:

1. The teaching profession lags in competitive salaries and large numbers of superior college graduates by-pass teaching.
2. Many present full-time staff members are not adequately prepared. For example, of the college health and physical education personnel only 34 per cent hold the master's degree and only 8 per cent have earned the doctor's degree. Obviously, the degree held is not the major criterion of good teaching but it does give evidence of the amount and to some extent the quality of preparation.
3. Many instructors are inadequately prepared for instruction and supervision in health and physical education. In the Pennsylvania public schools, 26 per cent of the teaching positions are now filled by persons with emergency certificates, which means they are only partially qualified. Since certification is not required in colleges, it is probable that a high percentage of the instructors are only partially qualified.

* Maul, Ray C.: Our Critical Need for Teachers. Journal of Health, Physical Education and Recreation. Vol. 27, No. 7. October, 1956. Page 29.

4. Too much of the college teaching load is carried by part-time instructors.
5. In spite of the above facts, there is very little in-service training of instructors on the college level.
6. College instructors are getting older on the average with about every one in ten sixty years of age or older.
7. Sixty-one per cent of the college instructors in health and physical education are men.
8. The turnover of instructors in college health and physical education is greater than in any other field.
9. From 1950 to 1955 the number of men prepared to teach health and physical education decreased about 55 per cent while the number of women dropped 21.5 per cent. Of these, only 54 per cent of the men and only 78 per cent of the women took teaching positions.

All these factors related to staff accentuate the problems of management and supervision. Inferior, or inadequately prepared, or part-time personnel, or a constant stream of new people caused by a rapid turnover all require more and better supervision. Instructors with larger classes or men teachers in charge of girls' classes will need more, not less, supervision.

The need for new facilities also will affect management and supervision. Present facilities are so tragically inadequate that new construction not only should meet present needs, but it also should keep up with increases in enrollment. This task is almost insuperable. Well-planned facilities should ease the problems of management and supervision but failure to provide adequate indoor and outdoor space may force retrenchment and a lowering of standards. Larger classes, reduced time allotments, and use of corridors, basements and old buildings will increase management and supervision problems. More supervision will be needed in more places.

Increased enrollments will mean more classes in physical education, more teams in intramural sports and larger squads in intercollegiate athletics. We must meet this challenge with more staff and facilities and larger budgets. We will need to give more attention to orientation, to guidance and counseling, to screening, and to evaluation and research. If we plan carefully now, we can better serve the youth that will enter our institutions of higher learning in the next decade.

WHAT ARE THE PROBLEMS FACED BY OUR PROFESSION
BECAUSE OF INCREASED ENROLLMENT IN REGARD TO
FACILITIES, EQUIPMENT AND SUPPLIES?

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The problem of Facilities, Equipment and Supplies is probably the most serious one faced by our profession because of the anticipated increase in enrollment. Relatively few colleges and universities are so fortunate that space and financial requirements will not be their major concern. All too many colleges have been handicapped and/or short-sighted in acquiring space for future expansion. And what department of physical education has not been faced with the constant threat of the administration placing a science building on the tennis courts or other playing fields? The need for new academic buildings, additions to libraries and heating plants will usually take precedence over buildings for physical education, and intramurals or recreation.

In a recent study^{1/} only three of sixty-three colleges surveyed indicated that they were "satisfied" with their present building facilities. Many stated that their physical education buildings were sufficient when planned but were outgrown and out-dated before completion. With six exceptions all complained of inadequate outdoor space even under present conditions - what will be their situation in 1960?

The rapid growth of facilities for athletics since World War II, particularly the expansion of football stadia and the building of massive basketball halls to seat large crowds, has and will in many instances hinder the construction of gymnasias and the acquisition of playing fields for physical education. Relatively few legislators, faculty, or even boards of trustees are able to distinguish between the difference in needs of these two departments. Many of the basketball arenas were planned to also serve physical education but some of the "palaces" are of very little value other than for spectators. The result will be that in many colleges when physical education requests a new two-million-dollar gymnasium the answer will be that "they" have just spent four million for such a building and cannot afford such duplication! This, despite the fact that many buildings for athletics have been completely or partially financed from gate receipts.

^{1/} Huelett, Vera, Trends in Construction of Physical Education Facilities, University of Kentucky, 1956. (Study not completed.)

What Will Happen?

Without expanded facilities (and of course teachers, staff, etc.) college administrators and faculties in many instances will ask for the curtailment or abandonment of the required physical education program. Two questionnaires came to the author's desk last week frantically asking for information to help bolster their attempts to retain their present programs of physical education. In fact such questionnaires and appeals have been coming all too frequently during the past three years.

It would seem, therefore, that every department of physical education must win this battle for space and equipment or remain static, face curtailment, or possibly suffer complete loss of certain phases of the program.

INSURANCE AND LEGAL PROBLEMS

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Legal Developments Affecting Public Education

I. Control of the School Curriculum

- A. The establishment and maintenance of a system of public education is an indispensable obligation and function of the state.
- B. The curriculum of the public schools is not restricted to the common disciplines but should include progressive studies designed to meet current needs.
- C. Courses of study prescribed by legislation must be taught.
- D. The fundamental authority to determine the system of education and the curriculum is the legislature.
- E. A board of education may include in the curriculum whatever subjects it deems necessary unless restrained by statutes or constitutional provisions.
- F. A board of education may include "extra-curricular, extra-mural, or extra-class" activities in its broad program and finance these by tax moneys.
- G. The decision as to what studies are immoral and/or dangerous rests with the board of education.
- H. A board of education cannot use its authority to enforce religious worship even in the denominational faith of the parents of the students.
- I. In the absence of statutory enactments, a parent or guardian may make a reasonable curriculum selection from the prescribed courses for his child. However, his selection must not be arbitrary.
- J. Professionally prepared teachers, principals, and superintendents should have exclusive control over methods of instruction and disciplinary measures.

- K. The Bible in any version is not a sectarian book and may be read in the schools without comment unless forbidden by state or local authority.
- L. A salute to the flag and an oath of allegiance cannot be mandated in the public schools.
- M. Subversive and/or un-American teaching is unlawful.

II. Extra Duty Without Extra Pay

The question of whether teachers are entitled to extra pay for extra duties was recently answered by a California court. The teacher sought extra pay for being required to be present, in a supervisory capacity, at three football and three basketball games during the school year. The court held for the board of education saying:

"Teachers are engaged in a professional employment and are not paid on the basis of so much per hour. The worth of a teacher is not measured in terms of a specific sum of money per hour. A teacher's duties and obligations to students and to the community are not satisfied by closing the classroom door at the conclusion of a class . . . The law requires teachers to cooperate with their superiors in the supervision of students in school activities."

III. Liability of Teachers Who Refuse to Testify Before Legislative Committees.

- A. In New York, the Court of Appeals upheld a decision of the Supreme Court holding that the section of the New York City charter that provided that any city employee who refused to testify regarding his official conduct before any legislative committee on the grounds of self-incrimination was subject to dismissal and that this was applicable to teachers.
- B. In California, a recent court decision that a teacher's employment is a privilege and not a right and that loyalty to government is a condition implicit within that privilege. Therefore, the discharging of a tenure-teacher who refused to testify before a legislative committee was legal.
- C. A similar case in Massachusetts supports the same doctrine.

IV. Liability of School Districts

The Supreme Court of Arizona recently held a school district liable for injuries received by a paying spectator who fell through

a stadium railing which was in a state of disrepair. The court held that the school district in renting its stadium to another school district for the sum of \$300.00 was engaging in the exercise of a proprietary function and thus could not claim governmental immunity.

A Kansas court refused to hold a school district liable for the maintenance of a nuisance (a slippery washroom floor) but said that its employees might be negligent for not having provided adequate supervision.

In a New York case, a court held that permitting 48 boys to play basketball in a gymnasium whose size was 80 feet by 43 feet and that contained eight overlapping basketball courts constituted negligence.

V. Power of a Municipal Corporation to Insure Against Tort Liability

A number of states feeling a moral obligation to persons injured by torts committed by governmental subdivisions in exercising governmental functions have enacted statutes enabling such persons to recover for injuries. This has been done through (a) making the subdivision liable in tort (b) authorizing the subdivision to procure liability or indemnity insurance and (c) requiring the employees of the subdivision to purchase a bond for faithful performance (a bond for faithful performance is a bond put up by an employee to guarantee that he will faithfully perform his duties).

VI. Effect Upon Municipal Corporation of Carriage of Insurance Against Tort Liability

In connection with the problem of whether a municipal corporation waives its immunity to tort liability by the carriage of liability insurance, three possibilities present themselves:

1. The corporation does not waive its immunity
2. Immunity to tort is waived to the extent of insurance coverage
3. Immunity to tort liability is completely waived

The majority of courts have considered these problems and have held that a subdivision does not waive this immunity to tort liability by the purchase of liability insurance unless legislative enactment has so directed.

States that have passed enabling acts permitting school districts to purchase liability insurance:

Immunity Waived?

Illinois	Yes
Indiana	No
Kentucky	No
Minnesota	No
North Carolina	No
Pennsylvania	No
Tennessee	Yes
West Virginia	No

VII. Liability for Accidents Occurring During School-Sponsored Field Trips and Excursions

A. Liability of School Districts

Except in those states which definitely abrogated the common law non-liability rule, school districts are not liable for such accidents.

B. Liability of Teachers

The liability of teachers under such circumstances is the same as their liability for accidents occurring in classrooms, shops, gymnasiums, and other areas of the school plant.

C. Liability of School Administrator

Under common law, a school administrator is not immune from suit for damages resulting from an alleged tortious act. Should he accompany a group of students on a field trip or excursion, he is subject to the same reasonable prudence as is any teacher. Whether or not an administrator might be held liable if he failed to adequately supervise teachers who sponsor these trips and excursions has not been determined by the courts.

D. Liability of Agency or Organization Visited

Courts appear to rule that if a student is on the property of a company, plant, organization, or agency for his own benefit - educational or otherwise - the company, plant, organization, or agency is not liable in case he is injured. The student's legal status in this situation is that of a licensee. If, however, a student is an invitee - one who has entered the premises as the result of an invitation, an enticement, an allurement - the company, plant, organization, or agency is liable if it fails to show reasonable care.

E. Suggestions to Teachers and Administrators in Conducting Field Trips and Excursions

1. Each administrator should have written policies governing such trips and the teachers should be informed of these policies.
2. All trips and excursions should be carefully planned in advance.
3. If the company or plant to be visited houses machinery, the teacher should make a personal pre-visit inspection and properly warn students of existing dangers if he decides to make the trip.
4. The teacher and administrator must determine what is adequate supervision both in quality and quantity - teacher-pupil ratio and competency of supervisors.
5. The teacher should require parental approval for each student. In no sense is this approval to be considered as a defense against liability for negligence.
6. If a teacher or administrator desires maximum protection, he will protect himself through the purchase of a liability insurance policy.

VIII. Recent Articles

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WHAT ARE THE PROBLEMS FACED BY OUR PROFESSION BECAUSE OF THE INCREASED ENROLLMENT FOR THE NEXT TEN YEARS?

HISTORY AND TRENDS

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It is difficult now to write the history of what is to come in the next ten years. History is usually considered to be an account of what has happened in the past. Perhaps, however, some constructive suggestions can be made. There are at least two different kinds of history. One is narrative history — the recording, primarily, of the dead past — where the past is, as it were, exhibited in a sort of literary museum for all to see. The lessons from that past are largely left for the reader to exhume.

There is, however, another and much more vital kind of history — a kind very seldom written — in which the account of the happenings of the past are presented as cause and effect. The social, political, educational and other pertinent conditions of the past are surveyed, and the effects of those causal factors are studied. It is a history of why and what; of situation and response; of cause and effect. Approaching the study of history from this point of view, the astute student can sometimes, as it were, write history before it has happened. Perhaps it is no accident that the subject which has been assigned to me is termed “History and Trends”. Perhaps more and more we should attempt to make history, not just to record its path after it has passed by.

As we look at the college physical education situation now, and consider it in the light of the crowded years to come, what do we see and what should be done about it?

The college physical educator much more frequently than not has assigned to him students who, because of very inadequate elementary and secondary school physical education programs, are neither physically fit nor physically literate. If their training in English were that inadequate, it would be a national educational scandal. The physical educator is given inadequate time and facilities to do a satisfactory job of training and retraining these students. There has been, in our country, no agreed-upon program — metaphorically, there are no texts, no references, no agreed-upon curriculum. Frequently, there are inadequately trained and incompetent teachers of physical education put in charge of teaching these students. There is no planned program leading to planned competencies that will insure knowledge of what to do and how to do it in the years following college. There is almost no national leadership to aid in pointing the way toward better conditions; it is almost every teacher for himself.

To crowd more students into already inadequate facilities will not help in the solution of the problem.

It would seem to me that we must attempt to change these trends of physical education history in our country. Perhaps we need to decide what the next steps in college physical education should be, and to make our trends, not just to follow them. This will not be easy, as we have many among us who differ widely in their philosophies of physical education, and it will not be easy to bring us closer together. I shall suggest, however, a few things that we might attempt to do.

1. We might undertake, over the next few years, a joint study of what our physical educational philosophies should be. We might exchange ideas of what our objectives should be, both for now and for the years to come in the lives of our students; and of what types of materia gymnastica et athletica would best lend themselves to accomplishing these objectives. We might think together of the best methods to use to implement these programs by exchanging our ideas, perhaps through a committee of this Association, and by repeated constructive criticisms and repeated re-writings; we might at least do what has seemed almost impossible in the past, namely reverse the present trend which seems to be to ride off in all directions at once, and begin to agree on some principles that could lead to a practicable solution of our problems.

Once we have some degree of agreement, perhaps we might examine our achievements by means of measurement. Have we bettered our results? Have we given our students more take-home pay to last down through the years? Have they become more literate in their physical educational and health ways? Have they learned, as voters, to support the goal of providing more of the greatly needed facilities?

2. Unfortunately, most of our research has been at the secondary school and college level. We know too few of the facts concerning the pre-school, kindergarten, and elementary school ages (not to mention the facts applicable to the ages usually associated with the blanket term "gerontology"). Can we ever do a good job of physical education in the colleges and universities if we have to continue to build on the atrocious physical education (?) usually found at those younger ages? Perhaps one of the most important things for us to do would be to turn our attention very strongly to building a more adequate physical educational base at the lower levels. How wonderful it would be to be permitted to teach just one class of boys in college who came to us with an adequate (up to that time) background of motor literacy! Then we could put on some polish! Right now we must usually accept the handicaps of an accumulated physical illiteracy and attempt to do as good an overhaul and repair job as possible before we can, so to speak, "tune up the engine." Often (metaphorically speaking) we just turn them out to pasture to play.

3. I should suggest that we approach our task in the light of attempting to be practical. Most college (and high school) programs do something for the student at the time, but most leave him with very little that he can use after the school years. We have trained him in gymnasiums, in swimming pools, on courts and fields, access to the like

of which for ninety percent of those men will not be available after they have left school. I suggest that we do some major concentrating on providing much training in activities that they can use, and that take a minimum of facilities, but which will, if used, prove effective. This does not, of course, imply that we should not push for adequate facilities, but these will probably not be available within the next fifty years.

4. Finally, I believe that we need more popular, practical writing that is usable and functional. I hate to admit it but I feel that when our college students leave our institutions, that we usually cast them adrift without a compass. I wonder how many of us, if asked suddenly and without warning to address a commencement-week gathering of the senior class, and were asked to recommend a book or books to tell what they could do, in any city or town, (a) to exercise, (b) to get and keep fit, (c) to have fun through physical recreation of a conditioning nature -- could give them an answer of which we could feel proud? I wince when I feel sometimes that they would get more of real useable advice from some of the popular faddists' magazines. It might be worthwhile for our physical education movement in this country to attempt the publication of a somewhat popular magazine, such as the American Medical Association does in the field of health, pointed towards the ordinary, physically illiterate, physically uneducated citizen.

Well, how about trying as members of this CPEA to set up the proper situations or causes so that the results or effects shall determine a satisfactory course of living history, and to provide a set of constructive trends to the end that this coming flood of college and university students will have been served as no other such group in the United States has ever been served. This would, of course, not imply that within the next few years we would find all of the final answers. I think that we all agree that we hope that physical education, health education, and recreation will continue to progress, to develop, and to bring us new and useful aspects of applied knowledge. But unless we begin to produce something that will solve our problems more adequately than we have solved them in the past, I'm afraid that most of our history is going to continue to be a narration of the miscellaneous professional travelings of numerous individualists, most of whom leave very few useful deposits along the trail. Do we have what it takes to take it from here?

PROBLEMS OF PROFESSIONAL EDUCATION

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I. Problems of Curriculum Revision:

- a. How to shorten the period of professional training with minimum decrease in teaching efficiency. Many schools have had to revert from a five year curriculum to a four year curriculum. Will it be necessary to shorten training even more?
- b. To determine if the Arkansas and Ford Foundation experiments are applicable to physical education. These experimental programs are preparing for elementary teaching persons who have a college degree, but no formal training in the area of education.
- c. Possible improvements in standards of teacher education by means other than elaborate tables and standards prepared for the various accrediting agencies.
- d. The problem of ever increasing diversification and specialization in our related areas. Major students are now being prepared for teaching health, physical education, recreation, dance, aquatics, athletics and other specialties. Will it be necessary to combine and give general backgrounds for all rather than emphasizing the differences?
- e. The problem of providing adequate backgrounds in the various biological and zoological sciences despite the crowded laboratory conditions and lack of staff in these fields.

II. Problems of Recruitment:

- a. How to bring back to teaching some of the qualified personnel no longer in the field. In California alone there are more than 100,000 certificated teachers in various fields who are not teaching. Many of them are from physical education.
- b. Will teacher training departments find it necessary to accept applicants who have not been screened as carefully as present students for academic, professional and personal qualities?
- c. How to evaluate for recruiting the "plus" factors in teaching

physical education such as retirement policies, medical and surgical benefits, extra pay for summer work and summer teaching, long vacation periods, extra pay for coaching or other after-school work. For college teaching some of the factors in addition to the above are free tuition or reduced fees for faculty children, the social and cultural events available for faculty members and families, sabbatical leaves, time for writing and research, the challenge of the brilliant students in classes.

- d. How to develop the personal pride in achievement and status and the professional attitudes required for a public school teacher to leave security, tenure and better pay to start at the lower ranks in college teaching.
- e. How to make it possible for able and experienced public school teachers to transfer to college teaching at higher faculty ranks than their degrees normally would permit.
- f. How to develop new sources of teachers for colleges. One source might be the experts in specialties who do not have the academic qualifications.
- g. What to do about the present practice of wealthy states with high salaries recruiting teachers from poorer states, and colleges resorting to the same practice in addition to getting staff members from public schools and junior colleges. No new teachers are being found, just new jobs for those already in the field.
- h. To what extent shall we lower the present requirements for selection and promotion of college staff members?
- i. To consider the hoarding of staff members by some of the tax supported colleges in wealthy states where they are building up large staffs far in excess of present needs in order to have staff personnel for estimated future needs.
- j. How to combat the constant losses of physical education teachers to administrative positions - should principals, supervisors and superintendents also be put on the single salary schedule set up for all teachers?

III. Facilities:

- a. How to prevent college administrators from usurping playing fields and other physical education facilities for greatly needed college buildings and parking lots.
- b. How to utilize more efficiently the indoor and outdoor facilities

now available - the problem of accommodating more students in fewer and smaller areas.

- c. How to secure the capital expenditures necessary for buildings, fields, pools and other physical education facilities which are proportionately higher than most facilities in unit cost. This is an especially grave problem for the privately endowed colleges.
- d. How to combat the "easy way out" advocated by some college administrators who wish to meet the shortage of staff and facilities by eliminating or decreasing the physical education requirement.

PUBLIC RELATIONS AND INCREASED ENROLLMENT IN COLLEGES AND UNIVERSITIES

William F. Meredith
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Ronald B. Thompson in an article entitled "The Impending Tidal Wave of Students," in the College Public Relations Quarterly for January, 1954 indicated that if no further increases take place in the present percentage of college-age youth who enroll in colleges and universities, the national enrollment will increase about one and three-quarters times between the present and 1970-71. He goes on to say that if the proportional enrollment grows to 50 per cent attendance at the average rate of 1 per cent a year (the average for the last twenty years), 1970-71 will see an increase of two and one-half times the present number of students.

While impressive, this is not an unusual state of affairs for higher education. Figures show that between 1900 and 1950, enrollment in higher education in the United States increased slightly more than ten times. The decade of 1910-1920 saw an increase of more than one and one-half times; 1920-1930 saw enrollments double; and 1940-1950 again brought an increase of more than one and one-half times.

Today's strongest colleges and universities are those which best met the challenges of the past five decades. Through foresight and hard work they grew in plant, endowment, faculty and enrollment. The Chinese people, renowned for their production of proverbs, have produced one which seems to have application to the situation facing our institutions of higher learning. It goes thus: The more you sweat in peace, the less you bleed in war. To meet the problems of the next fifteen years colleges and universities of sound foresight must start sweating now.

One important aspect of the effort involved calls for a sound program of public relations and constant, judicious dissemination of the data necessary to convince public that their help is necessary not only to keep the colleges and universities functioning this year and next, but also in support of an over-all plan, dramatic in its appeal, which will develop successively and successfully until the institution can ride the swelling tide on an even keel.

In the minds of those concerned with the administration of our colleges and universities, private and public, the most important public relations problem facing them today is (1) the determination of the primary role of the institution in meeting the educational needs of the day and (2) the getting of a clear-cut reaction to such educational philosophy from the people through a sound program of public information.

In all this there is recognition that the problem will be a continuing

one and will be growing in terms of larger student bodies, and greater numbers of parents to be dealt with all of whom will be interested in educational philosophy, the administration, the faculty, the curriculum, etc.

As for those of us in physical education there are some clearly defined obligations since our plans and programs must be included in the consideration of the over-all problem. Some of the things we should do include:

1. Broad reading on the problem.
2. Participation in faculty groups and committee studies and plans.
3. Attention to the problem in general as well as the particular aspects provided in our own institutions.
4. Immediate action to strengthen our own programs and position lost on the basis of public suspicion. In cases where limited facilities, etc., may result in dilution of the educational program, we may find our activities limited or discontinued. Some of the following should receive consideration:
 - a. An evaluation of our curriculums.
 - b. An evaluation of our teaching.
 - c. An evaluation of our facilities.
 - d. An evaluation of our personnel and other services to students.
 - e. An evaluation of our programs of public information directed toward the establishment of sound relations with students, faculty, alumni, parents and the lay public.

In conclusion, if the programs of physical education in our colleges and universities are to continue without impairment during the next decade those of us who are responsible for these programs must be sensitive to the pressures which will arise from our increased enrollment and sympathetic to the adoption of our programs and facilities for meeting the demands of the situation. If our programs are to continue to grow in effectiveness, we must recognize the problems that face us and strive energetically for solutions which will be in the best interests of all concerned.

Our programs of teacher education must necessarily be involved. Our efforts here must be in conformity with a tradition of the best in educational philosophy and performance and we must look with particular concern to the attraction to our programs of the ablest and most promising of the students, our teachers of the future.

SUB-COMMITTEE ON PROFESSIONAL STATUS

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In view of the enrollment crisis facing the field of higher education, physical education on each college campus in the country is faced with the imperative necessity of improving its status in the educational curriculum. Otherwise, in the years to come when the physical facilities are bursting at the seams with students and the need for ever-increasing numbers of faculty members is pressed upon the administration, it may be easier for some colleges to eliminate physical education than it is to meet the increased costs of the program. In the competition for funds that is certain to occur, programs of physical education that have not been established as indispensable areas of instruction on the campus will be the first to feel the axe.

Winning and holding status for physical education as an indispensable area of instruction on the campus requires vastly more than wishful thinking. One way by which this improved status may be accomplished is to elevate physical education to the understanding level among students, faculty members, and administrative officers of the college.

As an integral phase of the instructional program, physical education takes its place alongside of the other traditional educational disciplines. Personnel in this field must, therefore, accept the same responsibilities as representatives of other areas of the educational program. One such responsibility concerns the area of productive scholarship. Research, contributions to literature, and other forms of scholarly productivity are components of the teaching profession, particularly at the college level. If, therefore, scholarly activities are expected of faculty members in other areas of education, then there should be no exception to personnel in the field of physical education. Representatives of this field should be held responsible for demonstrating the same kind and degree of scholarship as other members of the faculty.

While present practice may exempt personnel primarily engaged in sports instruction, the not-too-distant future will witness many colleges holding the football coach, and others similarly engaged, to the same standards as apply to other faculty members. Physical educators in general are coming to realize, as practitioners in other professions have already learned, that there is no terminal point in the education of a professional person. The acquisition of a college degree, the attainment of a teaching or administrative position, or maturation through age or experience does not relieve the person of the ever-pressing need for continuous professional development. Teaching calls for constant study and self-improvement. In this respect there is nothing inherent in the

field of physical education that makes it different from any other area of education.

Administrative officers of the department and of the college as a whole are responsible for the status of physical education on the campus. If it is low, it is because the right professional people have not been selected to do the job. If physical education is to rise to the desired status level to make it an indispensable area of instruction, it will attain this position only if and when broadly educated and technically competent teachers are employed for the task. These educators must meet the same academic standards that are applied in the selection and employment of teachers and administrators in other departments of the college. Moreover, they should be governed by the same standards that apply to other educational personnel with reference to such matters as salaries, promotions, tenure, retirement, and other perquisites of the educational profession.

WHAT ARE THE PROBLEMS FACED BY OUR PROFESSION
BECAUSE OF INCREASED ENROLLMENT FOR THE NEXT
TEN YEARS - LEADERSHIP?

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Leadership has been defined “. . . as a process of influencing people, mediated through communication in a situational setting, to direct their efforts toward the attainment of understandable, specified and common worthwhile goals.”^{1/} In face of increased enrollments the problem is not only to maintain the present status of leadership but to improve leadership in the years ahead for college programs of physical education. It is believed that this can be accomplished if we face the problem in a spirit of adventure, with the hope of success and the wisdom of foresight. No alternative is present for we will be called upon to work with both quantity and quality whether we like it or not. The decision has been made by the American people to provide a college education to all who are willing and able to take advantage of the opportunity. The true greatness of American higher education is held aloft on the two pillars of quality and quantity.

This discussion will attempt to focus attention on the use and development of leadership only in relation to teaching and learning. It is unlikely that adequate numbers of well prepared teachers will be available so that the main effect on academic standards and leadership is going to be felt in the area of instruction. In the first place we must use, far better than we have in the past, the leadership available for the teaching-learning situation. This can be done if the faculty members are released from many time-consuming tasks to devote a larger proportion of their time to teaching. This situation is the result of a misinterpretation of the meaning of democratic administration. It has been indicated that administration must be democratic if it is to stimulate effective cooperative activity. This does not mean, however, that everyone has to be in on everything nor that all matters should be subjected to group debate. In some situations, implementing the concept means committees on top of committees, joint committees, standing committees, continuing committees, and even sub-committees of sub-committees. Yet in the publication, “Making Committees Effective” the number one idea reads, “Committees should be appointed only when there is a

^{1/} Raymond A. Snyder, “Leadership for College Physical Education”
58th Annual Proceedings, College Physical Education Association,
New York City, 1955, p. 191.

specific job to be done.”^{2/} To fully utilize the available leadership in instruction, faculty members should be freed of many “housekeeping duties” which could be performed through administration or by other means. A clear distinction should be made between those matters which are primarily curricular in nature and those which are primarily administrative in nature. Democratic leadership should be efficient in the use of teaching talent. Professors of educational administration indicate, “Democratic leadership, then, is the only acceptable kind of leadership for education. It gets things done.”^{3/} In this case democratic leadership provides for the highest quality of instruction with the available faculty in each institution.

Next we should extend the concepts of the “professional standards movement” to higher education in college physical education. The primary objective of this movement is to make teaching a pre-eminent profession. To do this the attitude of the people must be changed to develop a climate of public opinion favorable to teaching. One of the most devastating slogans ever created was “Those who can, do; those who can’t, teach; and those who can’t teach, become instructors in teachers colleges.” The professional standards movement, if carried out, can reverse this slogan as follows: “Those who can, teach; those who can’t teach must find some other profession such as law or medicine; and those superior teachers with the right professional background and experience will achieve status in a teachers college.” To make a change of this kind is not a “fly by night” affair but one which is long term in nature and one which will enlist all professional personnel.

According to Corey,^{4/} “. . . the development and maintenance of adequate standards in the identified aspects of teacher service is the means by which progress can most rapidly be made toward the establishment of teaching as a stabilized pre-eminent profession.”

Only the highest standards should be set for the college teachers of tomorrow in physical education. We must refuse any easy answers to the problems and take a long range view in raising standards all along the line. It has been learned in the elementary and secondary schools that quality attracts quality. Such an approach guarantees the achievement of long-term stability and status which are essential to both recruitment and salaries. Can high standards be defended in the light of teacher shortages. The only answer is yes, high standards can be defended in the

2/ “Making Committees Effective,” Local Association Activities Leaflet No. 20, Washington, D.C., National Education Association, (No date) p. 1.

3/ Providing and Improving Administrative Leadership for America’s Schools, Fourth Report of the National Conference of Professors of Educational Administration, New York Teachers College, Columbia University, 1951. p. 17.

4/ Arthur Corey, “The Professional Standards Movement in Education: How Teaching Is Becoming a Profession,” Journal of Teacher Education, 6:226, September 1955.

midst of the most serious teacher shortage in colleges for the next ten years. There is no logical alternative, for the evidence indicates that through this approach, more young people go into the teaching profession; there is an improvement in the corps of teachers in the states with higher standards; and a migration of teachers away from states with low standards. The question rests essentially with the profession itself. Do you wish to belong to and support a profession which lowers standards as the easy make-shift, and the quick answer, or do you wish to follow the longer, harder responsibility of continuing to raise standards for college teachers of physical education? Leadership through instruction will depend upon your answer.

In addition to sound and inspiring instruction before the student assumes his first position several other avenues for the utilization of leadership are open for consideration. In the first place we should develop a team approach in preparatory programs. This includes cooperative efforts not only within colleges and universities between the areas of general education, general professional education and specialized professional education, but such efforts should also be developed with our junior and senior high schools. The pattern of secondary education is set for our generation and we need not quarrel over the deficiencies of the high school graduate. Nor can we meet the problem by the premature and intemperate severity of punishing the student in the first two years of college. If it is true that we are approaching a serious shortage of leadership we cannot afford to flush out potential talent before it has had a chance to prove itself. We need to nurture and groom all leadership in the years ahead.

Secondly, we need to identify those students who are equipped to do outstanding graduate work and assist them in every feasible way to receive the essential experiences for continued movement up the educational ladder. The capable student should be given an opportunity to have his judgments and evaluations considered. We should keep in close contact with our graduates and after successful teaching experiences the more able ones should be encouraged and assisted to prepare for college teaching. At the graduate level superior students should be identified, as well, and encouraged toward the doctoral program. At the doctoral level the students' skill should have been tested, refined and highly developed before he receives his degree. Upon graduation from the doctoral program the student should be placed where he can use his art and skill in the finest way. This Association can do much in encouraging our college teachers in physical education to keep up to date, to do research, to write and to follow various avenues for scholarly productivity. We have a real obligation to do so in the next ten years.

Finally, in identifying, developing and utilizing all leadership potentials in the years ahead we must recruit a fair share of outstanding students for the physical education profession. The literature is replete with plans and procedures for such recruitment to take place from the elementary school through the college and university. Of outstanding merit are the various committees working in California to bring coopera-

tion between the junior colleges, state colleges and universities. The junior and community colleges are here to stay. They are vital sources for recruitment of outstanding students for our profession. We are obligated to work with them in developing fine programs of physical education and to recruit the most able students for the profession of physical education.

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AN ANALYSIS OF THE PROBLEM OF EXTRA PAY FOR ADDITIONAL SCHOOL SERVICES

By

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The problem of extra pay for additional school services has reached such proportions and is of such controversy that a reasonable solution is needed. The issue has not been resolved by any administrative policy which is generally accepted by the profession. Since the curriculum has been defined to include all the experiences planned for students by the school, teachers and other school personnel are called upon to render additional services. Many of these services are rendered after the regular working day. Additional pay for coaches represents the crux of the present problem but other teachers are involved as well, such as teachers of dramatics, art and music, to name only a few.

Many of the salary schedules now in operation provide for uniformity in pay scale for school personnel but in many cases abrogate the principle of justice. This is true especially for certain school personnel called upon to work longer hours and who shoulder greater responsibilities. Many school personnel supplement their school salaries by other types of employment outside the regular school hours. Such employment, however, is not open to personnel having responsibilities in connection with the school beyond the regular school day. When additional compensation is given to certain teachers, other school personnel feel they should receive commensurate pay when they perform additional duties. In some school systems where inequities appear, the morale of the faculty is lowered which is a serious threat to teaching efficiency. In *The Republic* Plato says, "Injustice creates divisions and hatreds and fighting and justice imparts harmony and friendship."

The factors of justice, extra compensation and equitable teaching load with additional school services, are not the only issues in the controversy. The major issue deals directly with the teaching-learning situation. The crucial question is, to what extent do additional school services lower teaching effectiveness during the regular school day? From the standpoint of teaching effectiveness, teacher load schedules have been recommended. But in many school systems where extra pay is given for additional school services these schedules have been violated which may influence teaching effectiveness.

* The survey part of this study was done in cooperation with Mr. Al Arps, Director of the California Workshop for Physical Education and Athletics and physical education teacher at San Fernando High School.

Statement of the Problem. This study is designed to analyze the problem of extra pay for additional school services. The purpose of the study is to find a solution to the problem of extra pay for additional school services keeping in mind effectiveness of teaching and the principles of justice in dealing with school personnel.

Importance and Need for the Study. The problem is of growing importance because the modern day curriculum demands many additional school services. To develop this curriculum all teachers are called upon, directly or indirectly, to provide certain additional services. It follows that if certain teachers are given financial consideration for additional services, then all teachers have a right to such consideration. Through a study of this kind, guide lines may be developed which will assist all interested groups in meeting the problem. A solution would mean a higher quality of education for our children. Better relationships would result between faculty members, superintendents, boards of education and other interested groups.

Scope and Delimitations of the Study. This study was delimited to include only those services related directly to the coaching of athletic teams. It was further delimited to only California Secondary School Districts as of the year 1955. Implications are made for other faculty members for the various component parts of coaching are related to the overall educational program.

Method of Study. The normative survey method of research was used in the study. Bibliographical references were used to obtain available information pertaining specifically to the problem. A basic questionnaire (Part I) was developed and answered by 109 coaches attending the Eighth Annual California Workshop for Physical Education and Athletics. From the basic questionnaire two other questionnaires were developed. The first of these (Part II) was sent to 90 secondary school principals or superintendents. Sixty-five or seventy-two percent of the questionnaires were returned by the administrators representing 46 different secondary school districts in California. The remaining questionnaire (Part III) was sent to 100 teacher educators in the physical education profession. Eighty-three or eighty-three per cent of the questionnaires sent to the teacher educators were returned and represented 25 teacher education institutions in California.

It was believed that this sampling would be effective because the coaches represented most of those who were receiving the additional pay; the administrators represented those responsible for budgeting and policy making, and the teacher educators represented those preparing the coaches.

Review of the Literature. The literature of the past ten years indicates a prevalent practice of giving some form of compensation for additional school services. This practice is not new and the compensation was given on the basis of released time during the normal school day or on the basis of compensation. In only a few instances both compensation and released time were given. In general, school districts have followed the practice of providing additional compensation. In these

situations only a few had any definite objective program for determining the amount of remuneration which should be offered. Eckhardt^{1/} indicated a scale for remuneration based upon: (1) the responsibility which the activity or extra service, carries, (2) the amount of time beyond the extra teaching load, (3) the size of the school. Each factor was given an index number weighted to give just consideration and 34 activities were approved by the superintendent to receive additional remuneration. There appears to be no question that "the laborer is worthy of his hire". But when an analysis is made of all the duties performed by teachers the issue becomes confused and complicated. For example, Heggerston^{2/} indicated the following considerations of every teacher: (1) teaching classes of students, (2) preparation for teaching classes, (3) consultation with students, (4) record keeping and marking papers, (5) assigned duties in connection with school activities other than classes, (6) professional activities which benefit the school system, the teaching profession, or the teacher himself, (7) civic responsibilities. Accordingly, if major differences cannot be avoided there should be a pay differential.

Most of the other studies made have been the survey type indicating the practices followed by the schools in providing additional pay. From these studies important implications for a solution can be found. Shaw and Krablin^{3/} write,

... the authors are convinced that teaching services should not be contracted for piecemeal and that negotiations should be on the basis of arriving at a salary which covers all the duties of a particular teacher. This should not be interpreted to mean that extra duties should be added to a teacher's load without an increase in base pay or that certain teachers should have greater responsibilities without added remuneration.

In 1950 a joint workshop was held by representatives of the American Association of School Administrators and the American Association for Health, Physical Education, and Recreation to form a policy statement on the problem. The policies indicated were:

1. That we should include all educational activities conducted under the jurisdiction of boards of education, insofar as possible, within the regular school program, thereby reducing to a minimum or eliminating altogether the title of "special

1/ John W. Eckhardt, "Extra Pay for Additional Services", The School Executive, 67: 38-39, November 1947.

2/ A. I. Heggerston, "Extra Pay for Extra Work", The Bulletin, National Association of Secondary School Principals, 32:146-155, November 1948.

3/ John H. Shaw and George H. Krablin, "Extra Pay for Extra Services", The Research Quarterly, 21:201, October 1950.

teacher" as well as "special services" and "extracurricular activities"

2. That we should endeavor to pay salaries to our teachers high enough to provide a comfortable living without the necessity of their seeking extra services, within or out of school, for extra pay.

3. That we should make every effort to equalize teaching load and benefits available to all teachers, insofar as possible, and not grant extra pay for certain school activities.

4. That in the event of unavoidable inequalities as implied in item 3 above, and extra pay is granted, such extra pay should apply to all teachers, and then only after the assignment of a reasonably full teaching load.

5. That we recognize the uniqueness of administrative problems confronting each school, district or community, and that such problems may require the interpretation or adaptation of the general policies contained herein to meet the special exigencies of the local situation.^{4/}

Before and after the above policies were established and published in 1950 the general trend has been to grant additional pay for additional services. A nation-wide survey of outstanding compensative schemes was published in the Scholastic Coach^{5/} in 1954 and sectioned the report as follows: Practices in Major Cities, Survey by National Education Association, Survey by American Association for Health, Physical Education, and Recreation, Survey by Philadelphia Board of Education, Survey by Kansas City Board of Education, and Survey by New York State, 1950. In these surveys can be found various ways of meeting the problems. In general, the most prevalent practice was to provide financial remuneration.

In a survey by McClain^{6/} a percentage of 70 responding favorably to an item or practice was considered to be significant. This led to the formation of the following guiding principles:

1. Extra pay is consistent with practices in other professions.

^{4/} Clifford L. Brownell, "What About Extra Compensation for Additional School Services," The Journal, American Association for Health, Physical Education and Recreation, 22:23, January 1951.

^{5/} "The Coach's Pay," Scholastic Coach, 24:44,46,48, September 1954.

^{6/} Warren J. McClain, "The Practice of Extra Pay in Secondary Schools of the Northeastern States," The Bulletin, National Association of Secondary School Principals, 38:97, October 1954.

2. Extra pay does not violate the concept of the single salary schedule.

3. Teaching does not become unprofessional when practices of extra pay are introduced.

4. The initiation of an extra-pay practice should come from teacher groups and the developed policy should be a result of teachers and administrators working together.

5. The economic needs of a teacher should not influence assignments, neither should the desire to encourage men to stay in the profession have any bearing on the selection of persons for extra work. Extra work should be assigned on the basis of the teacher's qualifications as to training and preparation. A teacher should not be assigned to an activity far removed from the classroom assignment in nature.

6. Amounts paid should be the result of careful and objective rating or weighing of the activity with recognition of the factors of responsibility and time. A flat hourly rate does not appear desirable but rather a total sum for the activity.

7. Teachers should not receive extra pay for after-school duties of a professional nature.^{7/}

Other references of interest to the reader are found in the bibliography.

Basic Assumptions. The following assumptions are made:

1. Teachers' salaries should be high enough to provide a decent and comfortable living without making it necessary for teachers to work in other positions in providing a suitable livelihood.
2. Effective teaching is the primary criterion to judge an effective administrative policy or procedure.
3. Athletics are an integral part of the physical education program as well as a part of the education program as a whole.
4. It is administratively sound to equalize teaching load for all faculty members as far as is feasible to do so.
5. The curriculum includes all the experiences planned for students under the guidance of the school.

^{7/} Ibid., p. 98.

6. A sound educational program depends upon, among other things, an adequate financial base.
7. Education in America is primarily a local problem and should be considered in relation to local school conditions.

Hypothesis. It is the hypothesis of this study that released time is the best solution to the problem of extra compensation for additional school services.

Analysis of the Data. (Condensed)

I. General Information.

- A. The 109 coaches responding averaged 10.22 years of coaching one to seven different sports although most men coached only two sports per school year.
- B. Eighty-six per cent of the administrators responding managed or coached athletic teams during their educational careers.
- C. Ninety per cent of the teacher educators responding had coached athletic teams during their teaching careers.

II. General Practices.

A. Coaching Assignment.

Coaches - Is your coaching assignment in addition to your normal teaching schedule? Yes-94 per cent, no-6 per cent.

Administrators - Are the coaching assignments in your school (or district) in addition to the normal teaching program assigned to your faculty? Yes-84 per cent, no-14 per cent, no answer - 2 per cent.

Educators - Do you believe coaching assignments should be in addition to the normal teaching program? Yes-17 per cent, no-75 per cent, no answer - 8 per cent.

B. Receive Compensation.

Coaches - Do you receive financial compensation, above your regular teaching salary, for your coaching services? Yes-74 per cent, no-26 per cent.

Administrators - Do you offer financial compensation above the regular basic teaching salary for coaching services? Yes-66 per cent, no-32 per cent, no answer - 2 per cent.

Educators - Do you believe that financial compensation should be received, above teaching salary, for coaching services? Yes - 31 per cent, no - 62 per cent, no answer - 7 per cent.

C. "Time Off."

Coaches - Do you get "time off" during the day to compensate for the time spent coaching? Yes - 10 per cent, no - 90 per cent.

Administrators - Do you give "time off" during the day to compensate for the time spent coaching? Yes - 26 per cent, No - 72 per cent, no answer - 2 per cent.

Educators - Do you believe in giving "time off" during the day to compensate for time spent coaching? Yes - 77 per cent, no - 14 per cent, no answer - 9 per cent.

D. "Time Off" and Compensation.

Coaches - Do you receive "time off" and extra compensation for your coaching services? No - 100 per cent.

Administrators - Do you give "time off" and extra compensation to the coaches for their services? Yes - 3 per cent, no 94 per cent, no answer - 3 per cent.

Educators - Do you believe in "time off" and extra compensation for coaching services? Yes - 19 per cent, no - 71 per cent, no answer - 10 per cent.

E. Privilege of Choice.

Coaches - Do you have a choice between "time off" or extra compensation for your coaching? No - 100 per cent.

Administrators - Do you give a choice between "time off" or extra compensation for coaching services? No - 95 per cent, no answer - 5 per cent.

F. Equivalent Time.

Coaches - Do you feel that periods off during the day are equivalent to extra compensation? Yes - 21 per cent, no - 79 per cent.

Administrators - Same question as above. Yes - 35 per cent, no - 55 per cent, no answer 10 per cent.

Educators - Same question as above. Yes 49 per cent, no - 41 per cent, no answer - 10 per cent.

G. Educational Values.

Administrators - Do you consider the coaching done in your athletic program to have the same educational values for your students as the teaching done in your daily normal program? Yes - 88 per cent, no - 11 per cent, no answer - 1 per cent.

Educators - Do you believe that athletics have the same educational values for students as other areas of the school curriculum? Yes - 90 per cent, no answer - 10 per cent.

H. Equal Responsibilities.

Coaches - Do you feel your coaching carries responsibilities equal to that of your teaching? Yes - 100 per cent.

Administrators - Do you feel that your coaches carry responsibilities, in performing their athletic services, equal to those of the teacher in the daily normal program? Yes - 85 per cent, no - 12 per cent, no answer - 3 per cent.

Educators - Do you feel that coaches carry responsibilities in performing their athletic services, equal to those of the teacher in the daily program? Yes - 92 per cent, no answer - 8 per cent.

I. Curricular Aspects.

Coaches - Do you consider your athletic program to be a part of the regular curriculum of the school? Yes - 82 per cent, no - 18 per cent.

Administrators - Is your athletic program a part of the regular curriculum of your school? Yes - 63 per cent, no - 32 per cent, no answer - 5 per cent.

Educators - Do you believe that the athletic program should be an integral part of the regular curriculum in the school? Yes - 92 per cent, no - 2 per cent, no answer - 6 per cent.

J. Academic Status.

Coaches - Does the physical education program, including athletics, receive the same academic status as any other area of the curriculum? Yes - 45 per cent, no - 55 per cent.

Administrators - Same question as above. Yes - 83 per cent, no - 14 per cent, no answer - 3 per cent.

Educators - Do you believe that physical education, including athletics, receives the same academic status as other areas of the curriculum? Yes - 31 per cent, no - 58 per cent, no answer - 11 per cent.

III. General Beliefs.

This section was introduced with the following statement: most secondary school districts have a six-hour working day, or a thirty-hour school week, or approximately 120 hours per school month; and pay salaries on a school month basis, which can be broken down into daily or hourly pay salaries. In line with these facts, please check one of the following questions on salary:

A. Method of Compensation.

Coaches - Check the plan you favor in compensation for your coaching services. Extra compensation - 73 per cent, "time off" - 6 per cent, extra compensation and "time off" - 21 per cent.

Administrators - Same question as above. Extra compensation - 66 per cent, "time off" - 20 per cent, extra compensation and "time off" - 5 per cent, no answer - 9 per cent.

Educators - Same question as above. Extra compensation - 13 per cent, "time off" - 58 per cent, extra compensation and "time off" - 14 per cent, no answer - 15 per cent.

B. Salary Method.

Coaches - If you favor extra compensation for coaching services, which of the following plans do you favor? Hourly pay - 21 per cent, monthly pay - 9 per cent, by season - 70 per cent.

Administrators - If you favor extra compensation for coaching services, which of the following salary plans do you favor? Hourly pay - 3 per cent, monthly pay - 2 per cent, by season - 65 per cent, no answer - 30 per cent.

Educators - If you favor extra compensation for coaching services, which of the following salary plans do you favor? Hourly pay - 2 per cent, monthly pay - 5 per cent, by season - 25 per cent, no answer 68 per cent.

C. Hours Spent Coaching.

Coaches - What would you consider the average number of hours you give to coaching and games each week? Average - 17.71 hours per week. 100 per cent answered the question.

Administrators - What would you consider the average number of hours your coaches give to their athletic program, including games, above their regular program each week? Average 10.94 hours per week. 79.97 per cent answered the question.

Educators - What do you believe should be the average number of hours given to the coaching assignment, including games, each week? Average 14 hours. 70 per cent answered question.

D. Weeks Spent Coaching.

Coaches - How many weeks of coaching do you have during the normal school year? Average 24.48 weeks. 100 per cent answered the question.

Administrators - During a thirty-eight-week school year, approximately how many weeks do your coaches average in performing athletic services while performing their regular teaching duties? Average 19.5 weeks, 69.5 per cent answered question.

Educators - How many weeks of coaching do you believe should be carried by a coach during a normal school year? Average 20.5 weeks, 64 per cent answered the question.

E. Regulatory Procedures.

Coaches - Does your school or district administration in any way regulate the number of hours you spend coaching? Yes - 29 per cent, no - 71 per cent.

Administrators - Does your school or district administration in any way regulate the number of hours your coaches can spend in performing their additional services each day? Yes - 28 per cent, no - 69 per cent, no answer - 3 per cent.

Educators - Do you believe a school or district should in any way regulate the number of hours a coach can spend in performing his additional services? Yes - 53 per cent, no - 29 per cent, no answer - 18 per cent.

F. Coaches' Pay vs. Teachers' Pay.

Coaches - If your coaching is of the same educational value as your teaching, do you believe it should receive the same rate of pay? Yes - 97 per cent, no - 3 per cent.

Administrators - If you believe your coaches' additional athletic services are of the same educational value as their normal teaching services, do you believe these additional services should receive the same rate of pay? Yes - 37 per cent, no - 45 per cent, no answer - 18 per cent.

Educators - If you believe coaching services are of the same educational value as normal daily teaching services, do you feel these additional services should receive the same rate of pay? Yes - 77 per cent, no - 13 per cent, no answer - 10 per cent.

G. Coaching Pay on a Recreational Basis.

Coaches - Do you favor coaching pay on the same scale as recreational leaders or playground directors? Yes - 9 per cent, no - 91 per cent.

Administrators - Same question as above. Yes - 5 per cent, no - 75 per cent, no answer - 20 per cent.

Educators - Same question as above. Yes - 1 per cent, no - 80 per cent, no answer - 19 per cent.

H. Coaching Pay on an Adult Education Basis.

Coaches - Do you favor coaching pay on the same scale as adult education teachers, "night school" teachers or continuation teachers? Yes - 60 per cent, no - 40 per cent.

Administrators - Same question as above. Yes - 23 per cent, no - 55 per cent, no answer - 22 per cent.

Educators - Same question as above. Yes - 20 per cent, no - 58 per cent, no answer - 22 per cent.

I. Coaches Pay on Basis Paid for Other Additional Services.

Administrators - Do you favor coaching pay on the same scale as that which you would pay for additional services of your drama teacher, music teacher, band director or sponsor of your school paper or year book? Yes - 66 per cent, no - 17 per cent, no answer - 17 per cent.

Educators - Same question as above. Yes - 40 per cent, no - 39 per cent, no answer - 21 per cent.

J. Suggested Additional Pay Scales.

1. All teachers carrying assigned additional duties should receive a token payment of \$300.
2. An index system should be established. Each additional service rated and given an index number. This number means a certain percentage of base salary will be paid.
3. Flat percentage salary increase for all additional school services approved and assigned by office of the superintendent.
4. Salaries for all additional services should be added to the yearly salary and should range from five to eight per cent increase.

K. Coaching vs. Teaching Efficiency.

Coaches - Do you believe that additional school services beyond the normal school day program of teaching, reduces teaching efficiency during the day? Yes - 49 per cent, no - 51 per cent.

Administrators - Same question as above. Yes - 38 per cent, no - 37 per cent, no answer - 25 per cent.

Educators - Same question as above. Yes - 73 per cent, no - 12 per cent, no answer - 15 per cent.

IV. Extra Financial Compensation. This was headed by the statement, "If you favor financial compensation rather than 'time off' for your coaching (coaches), please give your views on salary differentiation of the following."

A. Head Coaches vs. Assistant Coaches.

Coaches - Do you favor a salary differential between head coaches and assistant coaches in all sports? Yes - 76 per cent, no - 24 per cent.

Administrators - Same question as above. Yes - 49 per cent, no - 31 per cent, no answer - 20 per cent.

Educators - Same question as above. Yes - 34 per cent, no - 1 per cent, no answer - 49 per cent.

B. Head Football Coaches vs. Other Head Coaches.

Coaches - Do you favor head football coaches receiving more than other head coaches? Yes - 32 per cent, no - 68 per cent.

Administrators - Same question as above. Yes - 23 per cent, no - 55 per cent, no answer - 22 per cent.

Educators - Same question as above. Yes - 17 per cent, no - 33 per cent, no answer - 50 per cent.

C. See page 266.

V Other School Services.

This section was headed by the statement: "Many secondary schools or districts give extra compensation for additional services to teachers other than coaches. For purposes of fairness in comparing procedures, please give your reactions to the following:"

A. Compensation for Other School Services.

Coaches - Do teachers in other departments in your school receive extra compensation for additional school services? Yes - 69 per cent, no - 31 per cent.

Administrators - Same question as above. Yes - 40 per cent, no - 54 per cent, no answer - 6 per cent.

Educators - Do you believe teachers in departments other than physical education and athletics should receive extra compensation for additional public school services? Yes - 42 per cent, no - 40 per cent, no answer - 18 per cent.

B. Extra Pay on Same Scale as Coaches.

Coaches - If the above answer was "yes", is the extra compensation on the same pay base as your? Yes - 41 per cent, no 59 per cent.

Administrators - If the above answer was "yes", is the extra compensation on the same pay base as that of your coaches? Yes - 64 per cent, no - 36 per cent.

Educators - If the answer to the question above was "yes", should the extra compensation be on the same pay base as that for coaches? Yes - 74 per cent, no - 26 per cent.

C. Extra Compensation for Any Teacher.

Coaches - Do you favor extra compensation for additional school services performed by any teacher in any department in your school? Yes - 93 per cent, no 7 per cent.

C. SUGGESTED COACHING SALARY SCALES FOR ADDITIONAL SERVICES (RANGE AND AVERAGE)

	Coaches				Administrators				Educators*			
	100 per cent answered		48 per cent answered		10 per cent ans.							
	HOOR	AVE.	MONTH	AVE.	SEASON	AVE.	HOOR	AVE.	SEASON	AVE.	SEASON	AVE.
Head Football	\$2.00-6.25	4.05	\$50-225	140	\$150-1000	400	\$2.00-6.00	4.10	\$150-600	354	250-750	500
Asst. Football	2.00-3.50	2.25	30-180	75	100-500	275	2.00-6.00	3.50	150-500	242	200-500	305
Head Basketball	2.00-6.00	3.40	50-220	115	150-800	350	2.00-6.00	4.10	150-600	320	250-600	445
Asst. Basketball	1.75-3.00	2.00	50-150	60	100-500	200	2.00-6.00	3.25	150-500	241	150-400	272
Head Track	2.00-6.00	3.25	50-225	100	150-800	300	2.00-6.00	4.10	150-600	279	250-600	365
Asst. Track	1.50-3.00	2.00	50-150	60	100-500	175	2.00-6.00	3.25	150-500	213	150-400	255
Head Baseball	2.00-6.00	3.00	50-225	95	150-800	280	2.00-6.00	4.10	150-600	299	250-600	405
Asst. Baseball	1.50-3.00	2.00	40-150	50	100-500	125	2.00-6.00	3.25	150-500	224	200-400	266
Tennis	2.00-6.00	2.75	35-175	50	100-400	150	2.00-6.00	4.10	125-400	191	150-500	300
Gymnastics	2.00-6.00	3.10	50-200	90	150-500	200	2.00-6.00	4.10	145-400	195	150-600	316
Swimming	2.00-6.00	2.80	50-200	80	150-500	250	2.00-6.00	4.10	100-400	125	150-500	315
Golf	1.50-6.00	2.00	35-200	60	125-500	200	2.00-6.00	3.25	100-400	125	150-400	300
Cross Country	1.50-6.00	2.00	35-200	65	125-500	200	2.00-6.00	3.25	100-400	125	150-400	285
Wrestling	1.50-6.00	2.00	40-200	65	130-500	225	2.00-6.00	3.25	50-400	100	150-500	290
Intramural	2.00-6.00	3.00	50-125	100	300-500	350	2.00-6.00	4.10	200-400	261	150-500	350

* Only 10 per cent answered this portion of the study for most of the teacher educators did not favor the practice of providing extra pay for additional school services. They generally believed in the practice of "release time" for additional school services.

Administrators - Same question as above. Yes - 38 per cent, no - 54 per cent, no answer - 8 per cent.

Educators - Same question as above. Yes - 20 per cent, no - 60 per cent, no answer - 20 per cent.

D. "Time off" or Extra Pay.

Coaches (note: Coaches in general desire additional pay instead of "time off".) - If you believe in additional pay for additional services for all teachers should the pay be on the same salary scale as yours? Yes - 67 percent, no - 33 per cent.

Administrators - If you do not believe in additional pay for additional services for all teachers do you favor "time off" for additional services by any teacher in your school? Yes - 46 per cent, no - 54 per cent.

Educators - If you do not believe in additional pay for additional services, do you favor "time off" for additional services performed by any teacher in the school? Yes - 90 per cent, no - 10 per cent.

E. Extra Pay on Coaches Pay Scale

Administrators (88 per cent) generally agree that the pay scale for additional services should be the same for other teachers as it is for the coaches if additional pay is granted.

Educators - 73 per cent indicated that the pay scale for additional services should be the same for other teachers as it is for coaches if additional pay is granted.

F. Requests for Extra Compensation.

Coaches - Have the teachers in your school or district, other than the coaches, requested extra compensation for additional school services? Yes - 70 per cent, no - 30 per cent.

Administrators - Same question as above. Yes - 34 per cent, no - 49 per cent, no answer - 17 per cent.

G. Choice of "time off" or Extra Compensation.

Coaches - To the best of your knowledge, are the administrators of your school or district in favor of extra compensation or "time off" or both? Extra compensation - 71 per cent, "Time off" - 17 per cent, both 12 per cent.

Administrators - To the best of your knowledge are the teachers, including coaches, of your school (or district) in favor of extra compensation, or "time off" or both? Extra compensation - 68 per cent, "time off" - 6 per cent, both - 4 per cent, no answer - 22 per cent.

Summary, Conclusions and Recommendations

This study analyzed the prevalent practices of public schools in California in relation to the problem of extra pay for additional school services. In addition to identifying practices an attempt was made to determine the basic beliefs which guide professional personnel in dealing with the problem. The study was organized and the data analyzed along these lines: general information, general practices, general beliefs, extra financial compensation and other school services. The personnel contacted included coaches in secondary schools, secondary school administrators and teacher educators in the field of physical education.

Conclusions

1. The problem of extra pay for additional school services is a professional problem and, therefore, cannot be resolved the same way it might be in a trade or business. A major difference between a trade and a profession is the greater extent the professional person, because of professional ethics, is guided by public service rather than personal gain.
2. In the education profession "equal work" by two persons is a matter of estimate and approximation. Education is not a factory process where all work can be put on an hourly or piece-work basis.
3. From the standpoint of teaching efficiency extra pay for additional school services cannot be justified. Forty-nine per cent of the coaches, seventy-three per cent of the teacher educators and approximately half of the administrators responding to the question indicated that the practice of additional services reduces teaching effectiveness during the regular school day. This conclusion is further substantiated by recommendations of the N.E.A. "...standards of efficiency must be established in order to limit the increasing flow of exhausting teacher responsibilities if maximum teaching efficiency is expected... the total school week should not exceed forty hours, of which fifteen to twenty hours should be devoted to instruction."^{8/}

^{8/} National Commission on Teacher Education and Professional Standards, The Improvement of Teaching, Washington, D.C. N.E.A., 1947, pp. 115-116.

4. The coaching of athletic teams in California is, for the most part, an assignment beyond the normal school day and generally the coaches are receiving additional financial compensation.
5. In California, it is almost conclusive that the practices of "time off" or "time off" and compensation are not accepted.
6. It was unanimous in California that no choice between additional pay and "time off" is offered the coaches. This may support the policy of additional pay or that providing additional pay is the cheapest practice.
7. It was generally agreed that "time off" is not equivalent to additional pay.
8. There appears to be considerable inconsistency in identifying athletics as an integral part of the school curriculum. Approximately one-fifth of the coaches and one-third of the administrators indicate that athletics is not considered as a part of the regular curriculum. Yet by a large majority the administrators and the teacher educators believed that athletics provide educational values equivalent to other areas of the curriculum. Further, although a considerable majority of the administrators indicated that physical education, including athletics receives the same academic status as other educational areas, a majority of coaches and teacher educators indicate that this actually is not the case.
9. The administrators and coaches, by a considerable majority, favor additional compensation. The teacher educators, however, by a large majority do not favor the practice of additional pay but support the concept of released time.
10. From the teacher educator's standpoint coaching should be considered as teaching and should be given the same consideration.
11. If extra pay is provided the season plan is most favorably received. The average time spent coaching each week was 14 hours and the average number of weeks was between 21 and 25.
12. The issue of whether or not the hours for coaching should be regulated was not resolved. Generally speaking, it was indicated that hours should not be regulated.
13. Both coaches and teacher educators favor the same rate of pay for coaching as for other teaching duties. About half of the administrators disagreed with this concept. It is, therefore, evident that salary scales for coaching should be examined and clarified. For maximum effectiveness, both the coaches and administrators should agree on an equitable salary scale.
14. By a slight majority, administrators and teacher educators favor a pay scale for additional services of other teachers to equal the pay scale for coaches if additional pay is granted.
15. It was generally agreed that all head coaches should receive equal compensation for additional assignments and that all head coaches should receive more than the assistant coaches. This is indicative of providing more compensation for added responsibilities.
16. Of the schools represented in this study a slight majority are

giving extra pay for additional services to other teachers, as well as coaches.

17. Coaches generally believe that any teacher performing additional services should receive extra pay. Teacher educators and administrators are opposed to this practice. This may mean that the latter two groups have questions concerning the concept of additional pay. This is especially true considering the response of teacher educators.
18. In the schools represented by the coaches a large majority of teachers are requesting extra compensation for additional school services. In the schools represented by the administrators it was indicated that a majority of teachers, other than coaches are not making such requests. There appears to be hidden factors not revealed by this study.
19. From the standpoint of public school personnel the philosophy and practice of extra pay for additional school services is supported generally in California and will continue for some time. This practice in relation to athletic coaching has become more standardized and accepted in salary scales and personnel regulations than is the case in other areas of the curriculum.

Recommendations

1. It is recommended that a study be made to compare the cost of giving extra pay for additional school services and the cost of hiring additional school personnel so that released time could be granted. Granting released time instead of providing extra pay prohibits assignments to faculty beyond recommended standards for teaching effectiveness.
2. It is recommended, after taking all factors into consideration, that local school districts experiment with the following solution to the problem:
 - a. Make an equitable teaching load for all teachers for the instructional classes during the regular school day.
 - b. Identify all activities which consistently are planned after the regular school day. Prepare an index rating for these activities using the criteria of time and the nature of the responsibility. This index rating would then be used to determine the amount of released time provided the teachers who assume the above duties.
 - c. Distribute all other duties not identified in (a) and (b) to the faculty as equally as possible taking into consideration all personal and professional qualifications.

It is believed that the above plan provides the following: (1) an opportunity for effective teaching, (2) a fair distribution of the work load in a school, (3) an equitable salary scale for all teachers, (4)

provision for giving added weight for jobs carrying greater responsibility, (5) a plan for administrators to exercise administrative justice and, (6) flexibility for the administrator to assign personnel on the basis of personal and professional qualifications.

3. It is recommended that all parties concerned be represented at meetings where salary policies are developed.
4. It is recommended that a study be made of the time schedule of graduate studies in colleges and universities. In many situations salary advancement is provided for additional units of professional credit. When graduate courses are offered in the late afternoon school personnel having after-school duties find it difficult to qualify for salary advances set by unit requirements. This means that all factors should be considered carefully before arriving at a salary schedule.
5. Finally, it is recommended that a study be made of all regularly scheduled after-school activities to determine which ones could be scheduled during the last period of the regular school day. This practice would essentially cut down the amount of released time which it would be necessary to grant and would be, therefore, economical in terms of budget.

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SERVICE PROGRAM - PART I
Mark Wakefield, Indiana, Chairman

Co-education in the Service Curriculum for College
Students Under an Elective Program
Henry Shenk
University of Kansas

The University of Kansas is one of the few State Universities which does not have required physical education. Neither, I am told, does the University of California at Berkeley. I called this similarity to the attention of our administration when these two institutions, California and Kansas, made headlines in all of the papers last spring because of extensive "panty raids" on each campus; and suggested that there might be some positive correlation between lack of required physical education and panty raids. Since I have not heard from the Administration, I presume that they doubt the validity of the comparison!

To begin with, may I say that I am not advocating an entirely elective program, such as we have, at the college level or any other level for that matter. In fact our staff has been working for some time (without much success) to re-introduce a physical education requirement for our students. As a warning to those of you who might consider dropping your requirements, may I also say that we have found it much more difficult to re-establish the requirement than it was to do away with it.

But as much as I believe in required physical education and the merit of a requirement, I would not want a requirement at our University if it meant that we would establish such a requirement and then would start making exceptions and excuse band members, veterans, R.O.T.C. students, those over 30, those with disabilities, etc., until there would be fewer actually taking physical education under the requirement than under the elective program. Nor would I favor a requirement if, because of the requirement, grades or marks in physical education would not be considered as respectable as those in other subject matter areas, or if marks were not even given. We would hesitate to put in a requirement if by so doing students would not be given grade points and credit toward graduation as they are given now under the elective system.

Like most things in life the elective system is neither entirely good or entirely bad, not entirely white or entirely black. There are both advantages and disadvantages. Some characteristics of the elective program which have been noted are:

1. Students enroll in classes because they want the credit and want to become proficient in the activity. The class atmosphere is good and students want to learn, thus making classes easier to teach.

2. There must be a rather wide variety of offerings, well taught, to attract students since they are free to choose their activities. The quality of instruction has to be good or students will not choose the class.
3. Administration of the elective program is relatively easy. There are fewer administrative problems such as cutting classes, etc. Classes are also usually smaller than under the required program.
4. Students who need the activities most do not take them, whereas, other students often choose activities in which they are already fairly proficient. This is of course, undesirable and is the greatest weakness of the elective program.
5. The course offerings are more likely to be in carry-over activities such as individual sports and the dance rather than team games and calisthenics and gymnastics and body building activities.
6. There is not much opportunity or incentive for adapted sports courses under the elective program.
7. The elective program lends itself readily to co-education classes.

It is this co-educational phase of the physical education program which concerns us today.

In our departmental organization, both the men and women are in one department and one building. It is probably easier to offer co-educational classes under this set-up than it might be where the men's and women's departments are separate. We offer co-educational classes in social dance, folk and square dance, archery, golf, bowling, equitation, and fencing. There seems to be no good reason why some other activities could not be made co-educational also such as tennis, swimming, and bait and fly casting.

In order to find out just how many of our students were taking physical education under our elective program and what they took and how much, Miss Shirley Hughes, a member of our staff, was asked to make a study of the transcripts of our last year's (1956) graduating seniors. She made some interesting discoveries among the most significant of which were these:

1. Excluding law, medicine and the graduate school, there were 690 graduating seniors. Of this number, 55 per cent had taken one or more physical activity courses during their four years in college.
2. 262 or 38 per cent of the graduating seniors had transferred to K.U. from other colleges, Junior Colleges or universities where physical education was usually required. 72 per cent of the transfers had taken physical education at these other institutions.

3. While 55 per cent of all students had taken physical education someplace in their college careers, only 239 or 35 per cent had taken at least one course at the University of Kansas where it was elective.
4. Excluding physical education majors, the amount of work in physical education averaged 1.4 hours per person. Including majors, the average increased to 1.8 hours per person.
5. Over half (51 per cent) of the courses taken were co-educational. 54 per cent of the men chose co-educational classes as compared to 48 per cent of the women.
6. 35 per cent of the hours taken were in the field of dance; 33 per cent in individual sports; 16 per cent in team sports and 15 per cent in swimming. Women took more work than men. 44 per cent of the women elected courses compared to 30 per cent of the men. Men took the highest percentage of their work in the dance, whereas women favored individual sports.
7. In a comparison of the various colleges or schools of the University, it was found that education led all the rest with 70 per cent, the college of Liberal Arts and Sciences had 57 per cent, Pharmacy 54.17 per cent, Journalism 45, Engineering 40, and Fine Arts 34.

This study would indicate that under an elective system, co-educational classes will be very popular and that approximately half of the courses chosen by students will be in the co-educational area. There is drawing power in the opposite sex! Furthermore, dance holds great interest, particularly among the men. We are never able to offer enough social dance to satisfy all of the men who want experience and skills in social dancing. Bowling, fencing and golf are very popular with both sexes, with usually a preponderance of women. Archery and equitation attract mostly women, but there is a sprinkling of men.

The teaching of the co-educational classes is done by the most proficient person in the subject regardless of sex. Our dances and archery classes are taught by women, and bowling, equitation, fencing and golf by men. As was mentioned earlier, this is made easier because of our departmental organization with the men and women in the same department.

We have found practically no problems in having co-education classes. Some activities would not lend themselves to co-education as well as others, but it is felt in our institution that there are a number of reasons for co-educational physical education and very few against.

CO-EDUCATION IN THE SERVICE CURRICULUM

After two years of experimentation we opened all service classes at the University of Kentucky to both sexes in the fall of 1948. This consolidation was made possible and desirable because of three conditions: first, the men and women's divisions are administratively under the male Head of the Department; second, practically all facilities are within a stone's throw of each other; and third, the staff was unanimous in believing the relationship within the classes was more wholesome and natural when both young men and women participated.

During the experimental period some staff members were sceptical of the ability of a woman instructor to teach a class of predominantly male members and vice-versa. Others were skeptical of the effect of asking the men to report to the women's gym and the women to report to the men's gym but these fears were soon allayed. We soon found that the student does not care which sex teaches him so long as the teacher "knows her stuff". Nor did the woman student rebel at reporting to the men's gym for a class. In fact most freshman students are so confused that the A.G., W.G., or M.C., of the Schedule of Classes meant only a vague sort of place to report and many did not realize that certain ones were primarily women's or men's domains.

What Are the Advantages?

The advantages of a complete co-educational program are threefold: first and most important, it permits more economical use of facilities; second, more practical and judicious use of the staff; and third, resulted in more enjoyable and meaningful participation for the students. Let me elaborate.

Since our facilities, particularly out-of-doors spaces, are so limited, we soon learned that it was much more economical to consolidate a women's golf class of only ten members with one of men of possibly fifteen to twenty. Likewise, it is easy to see that these two sections could be taught by one person releasing the other to teach another sport or a similar class. Dr. M. G. Karsner, who has charge of our service curriculum, says that it greatly simplifies his scheduling of classes and assignment of teachers. And the students really like it - in fact, not one student in these eight years has come to this Department Head to complain of co-ed participation.

Two of the most notable results of mixed classes are that it eliminates swearing among the male members, and stimulates them to appear in class with clean clothes and clean bodies. Our instructors are particularly happy with these two rather unanticipated results. The instructors

report that the girls (and often boys) in such classes gain a poise that makes them less afraid to participate with their boy friends.

What Are the Disadvantages

There seem to be no real disadvantages. In some instances it may be difficult for a new teacher to adjust herself to teaching mixed classes or occasionally there is difficulty in the use of equipment (we furnish all sports equipment) but in general we experience far fewer difficulties than we did under the old dual system.

Probably the most difficult adjustment for the teacher is to devise an equitable grading system. It is obvious that usually the best girl badminton player cannot beat the worst boy player, so that the skill and competition grades must be adjusted accordingly.

Occasionally a softball or weightlifting class will show up with only one young lady enrolled and she may request transfer but usually the instructor very wisely utilizes her in such a manner that all are pleased with the arrangement. For instance, in softball let her slow-pitch and umpire occasionally, or in weightlifting she may help take the role and keep the bulletin board "alive" to give her added confidence.

In Conclusion

May I add that we are very happy with our program of co-education which is practiced in the professional curriculum as well as in the service curriculum. We believe that the students should learn sports together so that they will know how to participate together in later life. In fact, we believe in this so strongly that we will continue to keep our classes open to both sexes even if the facilities eventually become widely separated.

CO-EDUCATION IN THE COLLEGE PHYSICAL EDUCATION SERVICE PROGRAM

R. F. Struck
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When we consider the question of whether or not it is advisable to promote and sponsor co-educational activities as part of the college physical education service program, we cannot reach an intelligent solution without determining what we want to derive from the program, plus what we need to do to secure the desired results. This involves two considerations, namely: 1) an analysis of the objectives of the physical education program, and 2) the function of the service classes in achieving these objectives.

THE PROGRAM OBJECTIVES

In analyzing the purpose of education and the role it should play in the development of civilization, Henry Ward Beecher^{1/} wrote these words:

Education is the knowledge of how to use the whole of oneself. Many men use only one or two faculties of the score with which they are endowed. A man is educated who knows how to make a tool of every faculty - how to open it, how to keep it sharp, and how to apply it to every practical purpose.

A careful scrutiny of this statement substantiates the idea that John Dewey was correct when he stated that education is growth and that the criterion of the value of school activities is the extent to which they create a desire for continued growth and then supply the means for making such desire effective.^{2/} Activity is a growth necessity and its promotion is one of the things which education must encourage, if the challenge set out in Dewey's philosophy is to be met. However, the activity must not be confined to the mental realm alone, if we wish to develop individuals into strong, healthy, and well-adjusted citizens. It must also include opportunities for the development of the physical, the social, and the emotional phases of the individual's life, plus the inculcation of a desire to participate in activities which will contribute to the realization of these goals.

1/ Beecher, Henry Ward, The Public Speaker's Treasure Chest by Herbert V. Prochnow, Harper and Brothers, 1942, p. 318.

2/ Dewey, John, Democracy and Education, The MacMillan Company, 1925, p. 62.

THE FUNCTION OF THE PHYSICAL EDUCATION
SERVICE PROGRAM
IN THE ACHIEVEMENT OF THESE OBJECTIVES

A well-organized and well-administered physical education program can contribute much toward the realization of the previously mentioned objectives. However, the determination of what constitutes a well-organized and well-administered program is not an easy thing to do. Many ideas have been propounded, but no single one has been accepted universally. The writer believes, however, that excellent results can be obtained from an organizational plan which promotes an integrated and well coordinated program consisting of the service, the intramural, and the inter school phases.

The primary emphasis of the service program should be upon instruction. Each person should be given an opportunity to develop skills in a variety of activities to such a degree that he will have a desire to participate in these activities during his post-school as well as during his active school life. People prefer and enjoy doing those things which they can do well. They also tend to refrain from doing those things which they cannot do well.^{3/} Therefore, if they are to realize the benefits which can be gained from active participation in physical activities, an instructional program which emphasizes the teaching of the skills needed for such participation must be made available to them. However, a program of this type must be geared to meet the needs of individual persons. At the college level the needs of men students differ greatly from those of women. The types of skills which should be developed; the methods and procedures that should be used to develop them; and the rules which govern the playing of certain games differ so much for the two sexes that effective teaching would be very difficult under a co-educational plan. During this period of life men prefer to participate in vigorous games, particularly if they can do so with a fair degree of skill. Not only do they prefer to do so, but they need to do so. All of them are in the draft-age bracket and their actual physical fitness status must be good. It is also essential that they have the tools necessary to maintain, or better still, improve it. This they can do by means of active and vigorous participation. Since the desire to participate is greater when one has attained a fair degree of proficiency in needed skills, everything possible should be done to teach well those skills needed to take part in activities which require much vigor and endurance. Such is not the case for women, and as a result it would be unwise to have both sexes in the same class.

No program should be confined to these types of activities only. Physical education, to be worthwhile, must include all types of activities, and certainly many of these are adaptable to co-educational participation. However, these can be taught as well, or perhaps better, in sex-

^{3/} Bucher, Charles A., Foundations of Physical Education, The C. V. Mosby Company, Second Edition, 1956, p. 105.

segregated classes, because of the importance of methodology. Generally speaking, women are not as strong as men, they have less endurance, are slower to react, and have less power.^{4/} Their center of gravity is also lower. Thus the types of drills and techniques that could be used to develop the skills of men will differ considerably from those that would be effective for women. The problem of how to cope with individual differences in a physical education teaching situation is quite difficult to solve, even in sex-segregated classes. It would be still more difficult in a co-educational situation. The learning process is affected by the learner's performance ability; his attitudes, emotions, fears, and available energy; and his susceptibility to fatigue. In these characteristics women and men differ greatly. To be effective, teaching techniques must be adapted to the learner's needs and characteristics. The more nearly individuals are alike, the easier will be the solution of the teaching problem. Co-educational classes would probably complicate the situation greatly.

There is also a difference in the rules of many games as they are played by women and men. In his text, Foundations of Physical Education, Bucher^{5/} stresses this difference in these words: "Furthermore, boys and girls should not compete against one another after fourteen or fifteen years of age, unless the rules have been modified to allow for these differences." Co-education in physical education service classes would necessitate a modification of the men's rules for many of our games - a situation which could be quite undesirable.

Although the facts which have been given indicate that co-education in college physical education service classes would be unwise and impractical, the writer feels that there is a place for it in the program. Once the skills have been learned and developed, an opportunity should be given to each individual to use them in some kind of voluntary program. This would hold true for all types of games and sports, both team and individual. The program may be in the form of organized recreational periods, intramural competition, and interschool athletics. The recreational and intramural phases could and should provide opportunities for co-participation in those activities which lend themselves to such procedures. Such a plan would contribute much to the realization of sound objectives, but in the teaching situation of the service classes it would be a hindrance and not a help.

^{4/} Voltmer, Edward F. and Esslinger, Arthur A., The Organization and Administration of Physical Education, Second Edition, Appleton-Century-Crofts, Inc., pp. 84-85.

^{5/} Bucher, Charles A., op. cit., p. 251.

CO-EDUCATIONAL PHYSICAL EDUCATION FOR THE COLLEGE LEVEL?

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If teachers and administrators at the college level were asked the question, "Do you favor co-educational physical education in the activity of social dance?" the response would no doubt be in the affirmative. If the question, "Do you favor co-educational physical education in the activity of touch football?" were asked of the same individuals an overwhelming negative response would undoubtedly be observed. However, if one were to ask, "Do you favor co-educational physical education at the college level?" the response would depend on each individual's interpretation of what constituted a co-educational program of physical education.

It does not seem as though the controversy (if one exists) is in the philosophical value or desirability of the program, but in the many other factors that influence this type of program offering.

Research in this area has been limited to the survey type and relatively few studies are to be found in professional literature. In 1939 a study reported by Cobb (1) was concerned with certain factors of co-educational physical education offered for credit.

Thirty-five institutions that held membership in the Western Society during the spring of 1938 were asked to cooperate. Six of these colleges indicated no co-educational programs, two failed to reply and the questionnaire study was completed utilizing the 27 institutions that responded.

One part of the questionnaire dealt with the extent and the administration of the co-educational program over a three-year period. Archery, dance, and golf were the activities offered most frequently. Over half (14) of the schools indicated only one or two activities each year.

Conclusions as to the organization of the program indicated the women's departments had taken considerable initiative.

Certain activities were offered only in co-educational classes because of various reasons, and almost all of the institutions did not require the courses of students.

The second part of the questionnaire dealt with opinions of directors and instructors having some experience with the program with reference to certain aspects of the program. Conclusions stated that the opinion indicated that men generally learn the skills more quickly than women; that women learn faster in co-educational classes; that no difference in grading standards is necessary; that no sex difference existed with reference to knowledges; that students like co-educational classes better

than segregated; that social values of co-educational physical education were valuable and were attained by students, and that co-educational activities be continued. It must be remembered that this was the opinion of 67 college faculty members and that 45 of these were women.

From the replies of 2,112 students to a third questionnaire results indicated that students entered the class because of interest in the activity, that they liked the co-educational class and learned as much as in segregated classes, and that they would choose a co-educational class again in preference to a class for one sex alone.

In a study reported by Mason (2) eighty-five per cent of the men sampled were in favor of co-educational classes. The questionnaire method was used and 1,040 completed forms were analyzed.

One phase of a study completed by Hirshberg (3) in June of 1953 was concerned with co-educational physical education. A sample of 200 junior and senior women who had completed the physical education requirement were interviewed with reference to opinions concerning physical education co-educational programs.

Segregated classes were preferred to co-educational classes by 71.5 per cent of the sample. Fifty-three students or 26.5 per cent preferred co-educational classes, and two per cent had no preference.

For these students indicating a preference for co-educational classes the most common reasons given were as follows:

1. A natural condition.
2. Competition enhances best effort.
3. Divergent outlook conducive to better learning.
4. Aid to social development.
5. More interesting and enjoyable.

The reasons given most often by those who preferred segregated classes were as follows:

1. Creates embarrassment and self-consciousness.
2. Native ability and greater previous experience with boys.
3. Distracts from instruction.
4. Sexes try to impress one another.
5. Reluctance to compete with boys.
6. Uncomfortable with shorts on.
7. Development of feelings of inferiority.

In a recent sample taken of 251 male freshmen at Indiana University (4) by the questionnaire method, 164 students (65.33 per cent) indicated that they would prefer co-educational rather than segregated classes in physical education. Of this group 112 indicated no previous participation in co-educational physical education. Reasons for preference in order of frequency of mention were:

1. Aids social development.

2. More interesting and enjoyable.
3. Sportsmanship improved.
4. Personal appearance improved.
5. A natural condition.
6. More conducive to learning.

Interesting were the replies of six different individuals whose reason was given as, "I like girls." Two other students indicated a co-educational program would keep them from cutting class.

Of the 87 (34.67%) male students who did not prefer co-educational classes, 65 had no previous experience in a co-educational program. Reasons for preference for segregated classes in order of frequency of mention were:

1. Sexes trying to impress one another.
2. Less native ability with girls.
3. No competition with girls.
4. Creates embarrassment.
5. Costumes a problem.
6. Time wasted.

Of those who indicated previous participation dancing was most frequently mentioned as the activity taught.

Bookwalter and Stafford (5) reported the results of a questionnaire returned by 136 teachers of physical education. The 25 most preferred activities and the 25 least preferred activities are given in rank order by institutional level based on the opinion of the respondents. Advantages and disadvantages of this type program were also presented.

In a statement of philosophy by the staff of the Department of Physical Education of the University of California at Los Angeles (6) reasons for appropriately selected co-educational classes are cited, and recognition of certain differences and other factors that may influence such a program are mentioned. Specific cautions are given for the administration of a co-educational program.

The Educational Policies Commission in their publication School Athletics (7) recommends the co-recreation program be encouraged. The term co-recreation is used but the implication appears to be co-education.

Physical education programs are based on the existing philosophy of a particular institution. Course objectives are basic in evaluating educational achievement, and conflict as to the value or desirability of co-educational programs of physical education has been enhanced by a lack of agreement as to the primary objectives of a college education program. If the primary objective of a particular course of study is the development of skills it does not seem that a co-educational program would accomplish this purpose for men as well as a segregated class. If the primary objective of a particular course is social development, it would appear more favorable to offer the co-educational type of program.

It seems as though agreement is evident in favor of combined classes in such activities as archery, dance and swimming; and that segregated classes be held in basketball, soccer and speedball. Lack of agreement seems to be in the dual or team activities of tennis, badminton, volleyball, squash, etc. where skill and competition exist in the activity.

A summary of the existing opinions of various groups is presented here for consideration:

1. Women instructors, and women administrators favor expansion of the co-educational program.
2. Opinion of male instructors or administrators has not been investigated to any extent.
3. Segregated classes are preferred by a majority of women students at Indiana University.
4. Co-educational classes are preferred by a majority of male students at Indiana University and Ohio State University.
5. No contact activity is recommended for inclusion in a co-educational program.
6. The program must exist on a voluntary basis.
7. Emphasis of the co-educational activities is placed on skill and carry-over activities rather than strength and developmental activities.

There exist several administrative problems of a co-educational program that have not been solved to any degree of satisfaction. A few problems are listed here for discussion purposes.

1. What is the best method of financing a co-educational program?
2. What is the best administrative relationship of the men's and women's departments?
3. Does an administrative problem of scheduling classes exist?
4. How is the program best supervised and taught?
5. Are different standards necessary for evaluative purposes?
6. Do separate facilities create an administrative problem?

There exists a lack of published research in the literature of physical education concerned with the values or outcomes of a co-educational program in physical education. Further study seems necessary before any definite conclusions can be made relative to the need or achievements of such a course offering.

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SERVICE PROGRAM - PART II
H. E. Kenney, Illinois, Chairman

HOW TO GET THE PHYSICAL FITNESS INGREDIENT INTO
SPORTS EDUCATION -- TO IMPROVE IN SPORTS AND FITNESS

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Required service programs in physical education are now, and have constantly been, accused of forcing students to do what they already know how to do from grade school, high school and extra-school experiences. The guidance program, developed at the University seems to remedy this defect. There is too little time to do things well. The hurry, the inconvenience, the skimpy instruction, the poor conditions, inadequate equipment and the regimentation under poorly trained instructors all lead to a certain amount of discontent upon the part of students, parents and faculty, who constantly seek the ideal of a high quality instructional experience for the rather costly college or university period. Any waste of precious time, any inefficiency, any childish regimentation is severely criticized. The college period is one of serious study, cultural improvement, development of critical insight and intelligent appreciation of the better things of life. In this setting, optimum health and physical fitness are important qualities, not easily obtained or maintained, but presumably implemented by the required service program of physical education (sports-fitness education). It is good to examine the actual outcomes (fitness achieved) in the service courses.

No one objects to a certain amount of sociability in physical education, sports, or exercises. It is also granted that some physical recreation in life and also in college is primarily for sociability, such as, golf, dancing, swimming, skating, skiing, tennis, volleyball, picnics, sailing, etc. But all kinds of socio-physical recreation is available on every hand whether one is in college or not. It is available at the Y.M.C.A., at any good athletic club, at any summer vacation hotel or civic recreation center. Is it the serious purpose of credit courses in physical education to imitate the extra-curricula socio-recreational work or to acquaint the students with needed skills and aspects of physical fitness practice and theory, which are all too little understood or mastered in society and which are not available elsewhere? Time is so short and college time is so valuable, that we might do well to consider offering a quality experience in physical fitness. Few colleges or university departments concentrate upon the critical elements of physical fitness, yet these are hardly available anywhere else.

There are at least four ways to incorporate physical fitness but most of this work is poorly attended to in most college physical education service departments at the present time. Perhaps the University of Illinois service department is better than most.

1. An entrance physical fitness screen test may be required. The

results are revealing of the fact that the usual socio-recreational games and dancing programs do not produce fitness by athletic standards.

2. Certain courses for credit should be offered which primarily emphasize significant physical fitness experience, supplemented by recommended readings and examinations:
 - (a) Posture and Body Mechanics
 - (b) Physical Development (Body Building)
 - (c) Athletic Training and Organic Conditioning
 - (d) Physical Fitness Appraisal and Guidance (testing)
 - (e) Individualized Corrective Physical Education
 - (f) Research Project in Physical Fitness
3. Each activity or sport taught as a course should emphasize at least three types of tests:
 - (a) A general test of motor fitness, such as the Larson Chinning-Vertical Jump-Dipping Test, the Cureton 18-Item Test, Cureton Muscular Endurance Test, or the Cozens All-Around Athletic Ability Test. The tests selected should be taken at the beginning and at the end of the course. Improvement should be recorded.
 - (b) Specific diagnostic (analytical) tests of the elements of the sport.
 - (c) Certain units of physical fitness knowledge should be tested in connection with each activity or sport (warm-up procedure, principles of progressive build-up, optimum diet, specific training exercises, accident prevention, personal hygiene) as best adapted to each sport.
4. Individual research project in physical fitness for credit:
 - (a) In learning a particular skill under supervision and testing of an instructor or graduate instructor.
 - (b) In improving in physical fitness under supervision and testing of an instructor or graduate instructor.

In spite of well-sounding written or spoken objectives, the actual physical fitness improvements and knowledge about physical fitness are very meager in most required physical education classes for men. Evidence of this is cited in the attached bibliography. (3) (12) (34) (48) (55) (56) (57) It is easy to say, "All we want is for the students to have a good time." My prediction is that in due time this view will fail to sustain physical education as a worthy subject. Nor will it suffice to offer amusement activities just as they were taught in elementary schools or high schools. The college experience should be new, fresh, more analytical and a challenge to understanding. It is my conviction that the work should be much better done, perhaps, for fewer students who want it or need it.

Research evidence is available to show, for the normal young man of college age, that:

1. Organic endurance (stamina), strength, power and associated cardiovascular condition of high quality are seldom, if ever, obtained in classes conducted mainly for fun, relaxation and sociability. Only progressive, relatively hard physical exertion without frequent intermittent interruptions will develop additional muscular strength, capillarization, strengthen the heart and circulation, and lead to near optimum nutrition and physiological-psychological fitness. (2) (3) (5) (6) (8) (9) (10) (11) (18) (19) (20) (25) (28) (29) (30) Henschel's study reported that the active (though moderate and mild) physical recreational activities of middle-aged adults do not significantly influence physical fitness. (27)
2. Time is a great and almost all-important factor in developing cardiovascular and associated muscular endurance. (37) (68) With limited time sports are usually very inefficient in producing fitness of the muscular endurance, strength or cardiovascular kinds. In conditioning exercises, corrective work, swimming, endurance running, rowing cycling, skiing, skating, and all such endurance or conditioning activities, optimum improvement is never obtained in a one-semester course. Even in competitive athletics, several years are required of continuous progressive work. It took Zatopec about 7 years of hard training to reach his maximum endurance. (14) (15) (17) (30) (31) (34) Kiphuth points out that only college athletes learn the important lessons of persistent hard training. (36) This gives college athletic departments a great advantage over physical education departments.
3. Endurance tests are effective for motivation and to evaluate improvement. Improvement in physical fitness is a powerful motivator. Lack of it will nullify the effects of physical education in the minds of most individuals, in spite of platitudes and "philosophy". (3) (11) (15) (17) (18) (20) (22) (28)
4. Character training is best in activities which are progressively harder and harder, which tax the honesty, determination, courage, perseverance, will power and sportsmanship. In war-time, when high fitness and morale are stressed, we double or triple the intensity of the physical training work. (1) (4) (17) (37)
5. Integrated personal health training is best in a checked and tested program of physical efficiency centered on physical activity which leads to and encourages adaptation to stress, with attention to optimal diet for performance, higher levels of physical efficiency and health (including a medical examination, protective advice and reduction of handicaps).

The individual research case study is the best learning procedure but it can be applied to only a few of those enrolled in service programs. (6) (16) (17) (18) (20) (21) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (34) (36) (38) (39) (42) (43) (44) (48) (49) (50) (51) (54) (55) (56) (59) (60) (61) (62) (63) (64) (66) (67)

6. Enormous deficiencies exist in motor fitness and cardiovascular condition of college men as reported in many studies. (6) (13) (14) (15) (28) (29) (33) (34) (36) (41) It has been demonstrated that these are very improvable. But we should stick to the methods which will eliminate these deficiencies. It will take more time, hard work, serious devotion to physical training methods and genuine leadership to do it. It will not be done by allowing students to do always as they like, choose only the easy or social activities, or those they already know, or by setting a good time as the main and only criterion. And, as for "coed" work, boys and girls can train hard together as has just been demonstrated by the Australian, Canadian and Hungarian swimmers, who demonstrate a much more mature view of working together in hard training than our coddled and over-protected American girls.

In a final point, what are we achieving? Compare the figures of the Jackson (1940-41), Cureton (1942-43-44-45) and the MacLeay (1954-55) Surveys of motor fitness at the University of Illinois Men's Service Classes:

1. Notable progress has been made in learning to swim. The percentage who cannot swim 100 yds. has fallen from about 64%, 59.26%, 66.7% (three studies by Jackson and Cureton, 1940 to 1943) to 36% (MacLeay, 1956).
2. Chinning ability is as poor as ever, if not poorer. Brown (1944) reported the average college mean ability as 5.22 chins, improvable in a semester to 7.77; MacLeay gives the mean in 1955-56 as 3.95 chins in a random sample of about 400 men at Illinois.
3. In skinning the cat, Jackson (1940) reported 41.7% failures; in 1956 MacLeay reports 52%.
4. In dips on parallel bars, the 1940-41 mean as reported by Cureton was 7.146 for 2583 men at Illinois; in 1941-42 it was 10.67 for 3117 men; now we don't seem to have any figures; nor do we have figures on the vertical jump to show how much change has been made since the average was 20.3 inches for 3099 men at Illinois in 1941-42. Brown (1944) gave the mean as 20.96 inches for 250 men.

5. In the mile run, Cureton reported a sample of 176 in 1942-43, 46% failures of the 7:00 min. standard; Brown (1944) reported the mean to be 7:25.9 improvable to 6:40.6 for 129 men. MacLeay (1956) reports the mean to be 7:36 now for his random sample of 406 Illinois men.

These figures show that we are not any better off than we were in 1940-1944. There is even more need for basic physical fitness.

CONCLUSIONS

1. It is certain that we have not struggled hard enough to find the ways to motivate students or faculty toward achieving and understanding physical fitness. To take the easy way out, as some "play-minded" people want to do, is to suspect their unwillingness to struggle. It is unreasonable to believe that sports casually played will produce physical fitness or character training (33).
2. Widespread disagreement in our own ranks over the willingness to accept physical fitness as a main objective weakens us in any National Physical Fitness Movement. Dr. Hans Kraus has recently pointed to the "colossal failure of physical education" to effectively deal with physical fitness, a matter of great concern to the President and the nation.
3. Physical fitness for present and future should be the main platform of physical education service departments for men.

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A PLEA FOR EMPHASIZING THE IMMEDIATE NEEDS OF STUDENTS IN THE REQUIRED PROGRAM

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During the past three years educators, parents and writers have been telling us, "Why Johnny Can't Read." Today you are getting another picture: "Why Johnny Can't Run" or "Why Johnny Isn't Fit."

The truth is, America has become a nation without physiological ideals. And as a result Johnny lives a life of ignoble ease.

Because of this deplorable situation, I firmly believe in a program of vigorous sports and exercise for the college student. The kind of program that is conducted with emphasis upon his immediate physiological, psychological, and sociological needs. This point of view is shared by anthropologists, physiologists, physicians and outstanding leaders.

The Anthropologist.

Let us take a look at what Hooten(1), an eminent anthropologist, has to say about this:

"Civilized man endeavors to persuade himself that his intelligence improves and his mental health remains unimpaired, no matter how enfeebled his body has become. He has tried to believe that mental vigor and high ideals of conduct flourish in an organized environment of pathology and degeneration."

The Physiologist.

Morehouse (2), the physiologist, states that he is all for a program of vigorous sports, now. He warns us against the removal of stresses

and strains by substituting less vigorous sports. Sure it saves wear and tear on the organism. But this saving represents a decrease in human power and resilience. We must remember that hardship, not ease, strengthens the human fiber.

The Physician.

Lawton (3), the physician, raises the storm warnings when he cautions man about the hazards of soft living.

"All too early in life man begins to crack up. The reason? Easy living. Medicine has managed somehow to keep the motor running. You people can lend a hand in delaying this deterioration.

"Impress your students with the importance of 'getting fit' and 'staying fit.' And give them this caution: There is no royal road to fitness."

The Leaders.

Many of our prominent leaders supply us with some interesting opinions. Opinions that are in favor of programs for the immediate needs of students. For instance Scott (4) has this to say:

"The prescribed program has a dual purpose: (1) to develop strength, endurance, and agility through the practice of age old, natural activities; and (2) to develop competence in movements which form the basis of all games and sports."

And Daniels (5) mentions seven good points as to what the adapted program is designed to do. In all seven points there is an air of immediacy.

In 1937 Ralph LaPorte (6) headed a committee that completed a ten year study. It was revised again in 1951. This study evaluated thirty sports and games in terms of their developmental and educational contributions. And what about casual activities like archery, bowling, bait casting, power boating and sports appreciation? Archery was found to be very low on the scale of values, and the other activities were not even mentioned.

Stafford (7), by means of the Larson Dynamic Strength Test, classified thirty-eight activities as to their vigor. The least vigorous were archery, bait casting, bowling, clog dancing, golf and social dancing. The more vigorous ones were apparatus stunts, boxing, individual athletics, individual tumbling, life saving, wrestling.

Cureton (8), in a study of students in the Illinois service class program, found fitness to be at a low ebb. Why? Because the program lacked time, leadership, facilities, and too much emphasis on social activities in class.

I cannot reconcile myself to a physical education which equips a student with the theoretical technique of what to do with the roll, pitch

and yaw of a power boat ten years hence. I am much more concerned with teaching him today, the skills, the stamina, the knowledges and the social traits which are the immediate outcomes of swimming.

What prompted President Eisenhower to call a conference on Fitness of American Youth? Was it because of their future needs? No! It was because he was convinced of their immediate needs.

You and I, like the physician, are committed to the task of attending to students' needs, now. We cannot, in all good faith, allow them to sign up for archery, bowling, and sailing and feel in our hearts we have fulfilled our responsibility.

As responsible people we must direct him into vigorous sports and exercises. Let him push himself beyond the "second wind" barrier. And, like Teddy Roosevelt, let us preach the doctrine of the strenuous life.

Let us make Johnny fit, now. This is our task. This is our responsibility. This is our mission.

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SHOULD COLLEGE PHYSICAL EDUCATION PROGRAMS BE PRIMARILY FOR THE PRESENT OR FOR THE FUTURE?

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Should College programs of physical education have as their objectives primarily the development of an adequate degree of total fitness now — while in college — or be planned primarily to teach the students how to get and stay fit in later years? If the latter, it could be solely a textbook, lecture, motion picture type of course with almost no physical activity "laboratory" work at all. Here the student could be taught how, in later years, he might — if the notion appealed to him — get fit and stay so. Such theoretical instruction has, however, almost universally failed to produce results.

If the course should be a laboratory course, where the activities taught were practiced, and if such practice was not adequate to produce fitness now, it is unlikely that such activities, if practiced in later years, would be any more successful in producing fitness then. Hence, I would favor instruction that is adequately strenuous and adequately well planned, conducted to produce fitness at the time, to insure that the program could be adequate later.

Being limited to eight minutes, I shall try to make a few specific points very briefly.

1. I can see no need to choose a program that will produce fitness now but which can be demonstrated not to be adequate to produce fitness later. Why should it not do both? I have consistently opposed the kind of limited thinking that seems to be able to keep in mind only one idea at a time. One of the reasons we seek a college education is in order to be able to cope with relatively complex batteries of ideas. Why "either-or" rather than "both"?

2. Adequate programs for now should be practicable. For example, any program that puts the emphasis mainly on such so-called carry-over sports programs as tennis certainly needs to be questioned. Chicago, for example, has one tennis court for each 6,700 of its population. If we think only of the adults between 18 and 45 this would be approximately one court for each 3,000 of the population. Iowa City (pop. 20,000 non-university students) has three public tennis courts, or about one for each 6,666 — about the same ratio per thousand as in Chicago. How many tennis courts are there in your town? Programs that stress primarily non-active recreational skills, such as sailing or fly casting with little or no physical content, may be educational but are they physical educational? Likewise activities that are apt to be practiced not over twenty times a year, such as golf, are not as practicable for physical conditioning as are activities that can be practiced much more frequently.

Physical educators who propose only completely impracticable carry-over programs do no important service to our profession.

3. In a country that prides itself on being able to sell anything to anybody — we physical educators tend to hold that “nobody can be persuaded to do any home exercises.” Well, if they cannot, most will, in future years, do no exercise. In the United States facilities for achieving fitness by sports programs alone, for even 20 percent of our exercise-age population will probably not be available within the lifetime of the great grandchildren of the people in this audience. I believe that the physical educators who like myself have available golf courses, swimming pools, handball courts, and other college and university facilities, and who therefore, assume that the same will someday be available to everyone, need to check up to see if they are not just day dreaming — one of the symptoms of the schizoid personality. (You know that it is said that the neurotic builds air castles; the psychotic lives in them; and the psychoanalyst collects the rent!) Are you facing reality? You can, you know, do some kinds of exercise anytime in any place (even in a Pullman berth) — at zero cost, and with almost maximum organic exercise efficiency. Should we not teach this training and give experience in how to do it as well as teaching sports of various kinds? I am completely unimpressed by the commonly advanced statement that “this kind of thing is not in harmony with the spirit of the American people”. Apparently, neither is widespread participation in sports or any other kind of exercise program! If we physical educators teach that it is almost shameful to get and stay in shape by home exercise, who else will lead the vast host of the physical-educationally blind?

4. Will many college students who have never known what it is to be in good condition ever want, later, to get in such condition? We seldom seek that of which we have experienced almost nothing. I believe we need a college instructional program, largely laboratory in nature, to give exercise experiences that are meaningful to students.

5. Part of fitness is physical literacy. Just as in teaching English, a good teacher will not tolerate such grammatically “unskilled” expressions as, “He ain’t got no time for boning up”, or “This was just made for you and I” (an expression not unknown among some college faculty members!), so I believe that the teacher of physical education should be just as alert to correct errors of the motor skills as the academic teacher is to correct errors of English. Some of you may have run across in your earlier years a great German textbook on the dance by Zorn, entitled (English translation) “The Grammar of the Dance.” Perhaps we need more emphasis on the “grammar of motor skills”. We would not graduate as many motor illiterates from our colleges if all up the line from elementary school to the college we were alert to see that such errors were checked and corrected before bad motor habits were formed — all too often to last for the lifetime of the individuals. To me this is a part of “fitness now”. Those who are so vocal in supporting the concept of total fitness, should, it would seem to me, be alert to evidences of skills-unfitness at all ages.

6. Just as learning to read in the grades and high schools is not solely to acquire ability to read the newspapers in later life, but is the

tool with which the pupil seeks knowledge from the first grade on up, so it would seem to me that our programs of physical education from the beginning of school up to where physical education is no longer offered to pupils, should be such as to be useful now, and not solely something to bolster a pious hope that the pupil may someday in later years become exercise conscious.

Therefore, in the light of these statements, I feel that our physical education program at any level should be useful now — and not just be planned for some unknown time to come; these programs should be useful for the development of total fitness, for physical fitness, for motor literacy, for knowledges about ourselves, for knowledges of how to get and keep fit now, and (by continuing these programs ourselves) for later. I would hold that a program that is not useful now is apt to be pretty futile in later years. And if we in the colleges and universities do not see to it that we get greatly improved programs from the kindergarten through all of the years of educational experience of our youth, we shall continue to be numbered among the nations with the poorest physical fitness levels in the world.

PHYSICAL EDUCATION AS A PHASE OF GENERAL EDUCATION

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The time is ripe for workers in collegiate physical education to re-double their efforts to help other educators, students, and the lay publics to understand the purposes and practices in the field. These efforts should be directed toward helping people to understand that physical education is, in the final analysis, a method of teaching and learning. As professional people we cannot afford to delay any longer vigorous offensive action designed to help students, educators, and laymen understand what physical education, including competitive sports, is; what it means to people in terms of improved health, welfare, and education; what it contributes to the development of functional citizenship; and the role it plays in cultural and aesthetic development and in the enrichment of life and living in a democratic society such as ours.

Since the very beginning of organized physical education in the schools and colleges of this country and up to mid-twentieth century, the efforts of practitioners in the field were directed toward the development and improvement of performance skills and teaching techniques. Physical education was something the teacher did to and for the student. The program was conceived of then, and still is freely referred to by our professional people, as a "service" area in the school or college. Involving, as it did, participation in motor activities, it was then, and still is, valued by students, teachers, and others primarily for its exercise, or physiological outcomes. Obviously, motor skills were essential adjuncts in an

efficient exercise program. To many people, the goals of physical education were the acquisition of physical fitness and the development of motor skills. They conceived of physical education primarily as a means of physical conditioning and of body training. Anything that exercised people or required dexterous motor movements was considered to be physical education.

For considerably more than a century the physical education program was planned for the students by the teacher. Students had little to say concerning the kind or scope of experiences the school or college was providing for them. Save, perhaps, in a few areas of the program, such as competitive sports and the dance, for example, each class period tended to be a terminal experience for the student. Furthermore, exercise was something people did; it was not necessary for the participant to discuss it or even to understand what was happening to him. In a vague sort of way the student realized that exercise, like spinach, was supposed to be good for him because it had something to do with improving his health and his physical well-being.

The second half of the present century has ushered in many critical changes in educational thought and practice. So great have been the advances in education that in many respects it appears that physical education is being left behind. If this is true, and many believe it is, then individually and collectively physical educators should re-evaluate and redirect their concepts and practices in the light of evolving educational patterns.

The word "curriculum" has had many different meanings throughout the history of American education. For many years the word referred to the organization of specific subjects or areas of education which were planned for the student by the teacher. Subjects were selected along traditional lines; the administration of the curriculum was rigid and fixed. Standards of achievement were arbitrarily established, pupil progress was placed on a time schedule, and all students were expected to advance on an even front, taking the curricular hurdles in unison and on time.

At mid-century the concept of the curriculum differs considerably from that of former years. Instead of considering it as the organization of particular subjects or areas of education, it is presently viewed as consisting of all the experiences the student undergoes under the guidance of the school. Rather than being restricted to the narrow concept of subject matter alone, the modern curriculum is developed in relation to the total environment of the school. It is "the interaction of all these factors that determines what experiences learners will have and, consequently, what they will learn."^{1/} In this concept of curriculum, the school becomes an enterprise in actual living, the elements of which are drawn from the total culture. Students learn through their experiences. Since experiences are continuous, the curriculum can never remain static; it

^{1/} Kenneth D. Benne and Bozidar Muntyan, Human Relations in Curriculum Change, New York, The Dryden Press, Inc., 1951, p. 5.

must be dynamic in terms of an ever-changing, developing society.^{1/} Furthermore, the modern conception views the curriculum as a reciprocal enterprise; a two-way street on which the student and the teacher cooperatively plan and otherwise work together to accomplish the goals of the school.

One of the most recent changes in the curriculum of schools and colleges is the rapid development of the area of general education. General education may be defined as "that part of the educational program which seeks to develop in the student the common understandings, skills, and attitudes needed to function effectively as a person, as a member of a family, and as a citizen in a democratic society."^{2/} General education arose out of the need to counteract the inroads of highly specialized, narrowly conceived vocational or professional education. By and large it is generally agreed that general education seeks to develop skills, understandings, knowledges, attitudes, appreciations, and competences which will aid the individual to live more effectively in a complex society such as ours. The purpose of general education is not merely to master a body of knowledge; rather it must be understood and interpreted in terms of improved behavior.

The goals of general education are the goals of physical education. As an integral part of the area of general education the college program of physical education seeks the same goals as the field of general education. The only thing that makes physical education different from other areas of the program is the method through which the goals of general education are accomplished. Physical education makes its contributions to general education through the medium of motor movements — the games, sports, dances, aquatics, and other activities which comprise the program of physical education.

The primary responsibility of mid-twentieth century physical education is to aid students in planning, selecting, and participating in motor activities through which the goals of general education are achieved. The processes of planning, selection, and participation require the utmost in understanding both in the fields of general education and physical education by students, educators, and laymen. It is extremely doubtful if understandings in physical education can be developed through participation in motor activities alone. These understandings, however, are essential if physical education is to qualify as a legitimate phase of general education. Understandings are derived primarily from planned experiences involving the acquisition of factual information relating to the growth and development of the individual and of society, technical information concerning a variety of motor activities, and the competences necessary to participate with pleasure and profit in the activities selected.

^{1/} Raymond A. Snyder and Harry A. Scott, Professional Preparation in Health, Physical Education, and Recreation, New York, McGraw-Hill Book Company, Inc., 1954, pp. 46-47.

^{2/} Ibid., Snyder and Scott, p. 52.

More specifically, through the avenues of instruction and guidance, all students should be aided in understanding the meaning of physical education. They should be helped to explore their own levels of aspiration in physical education and formulate their own goals in the light of these aspirations. They should know the exercise needs of the body and understand the factors involved in selecting appropriate activities for personal participation. In addition to the activity phases, all students should be given opportunities to understand and appreciate the health, educational, and recreational implications of physical education. They should understand and appreciate the role this original method of education has played in the cultural development of people from antiquity to the present time. They should understand the implications of physical education for improved home and family living and acquire competences in activities appropriate for enriching this area of life.

Students should know the part physical education plays in war and in peace and of the obligation which the youth of this country have to develop and maintain motor efficiency and total fitness. Moreover, they should know and understand the application of the rules, traditions, and customs of a variety of commonly played games, and acquire the ability to read and understand box scores and other means of reporting the results of athletic competition. Furthermore, all students should learn to recognize and appreciate the aesthetic qualities which abound in plays, games, sports, dancing, and other forms of motor expression. Students should learn to recognize skillful performance in order to become intelligent, appreciative, and sportsmanlike observers of motor activities. In addition, they should be able to select intelligently, care for, and repair various kinds of sports equipment.

Moreover, if physical education is to qualify as a phase of general education and mean more than mere exercise, students should be given opportunities in group situations to verbalize and discuss their motor experiences and to evaluate them in relation to scales of values which they have set for themselves, involving such matters as quality of performance, personal conduct, and other desirable social and educational goals.

In our efforts to educate students for a future, as well as a present satisfying physical recreational life, however, mere acquisition of motor skills and mere participation are not enough. There must be participation with understanding. Little should be taught in physical education program that is a terminal experience for the student. Through the processes of instruction and guidance efforts should be made to ignite in the student the spark of understanding which makes it possible for him to see beyond his present experiences. He should be helped to understand, for example, that his exemplary conduct as a player and as a spectator at athletic contests here and now, may, in years to come, spiral into a type of social consciousness which has great significance for improved human relations among all people. He should understand that the health and social benefits accruing to him through participation in physical education activities have a larger significance for the improvement of the health of the public and the enrichment of the home and family life of

all people. Furthermore, these activities may equip the future parent with the ability to participate effectively in the physical education of his own children and to engage with pleasure in their physical recreational activities. The student should understand that the physical recreational activities, or the competitive sports which give him pleasure now, are potentially valuable for all people. Thus, as an adult citizen in the years to come, he might actively support community projects leading to improved educational and recreational facilities for all people in his community. These, and many other learnings of a similar nature, are absolute essentials if physical education is to qualify as an integral phase of the school or college program of general education.

PHYSICAL EDUCATION AND LONG-RANGE NEEDS

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Physical education is offered in our schools and colleges for several important reasons. No reasons, however, are more important than those related to enriched living. Living is not enriched in one day, nor does it retain that quality for just one month or even a year.

Physical education, properly taught and well learned, means that this organized learning experience contributes directly to a large part of a person's recreational and other needs. The recreational needs of an individual are not fleeting or transitory. They are a part of life. The need for their expression is constant and extends over many years.

Physical education, at its ultimate best, means the adding of personal resources for the enrichment of living; the ability to satisfy recreational needs of many kinds, and under varying conditions. It is the taking on of skills, knowledge, values and behavior qualities which remain as part of the personality and become identified with a person's way of living.

It must be obvious that the real meaning and purpose of physical education goes beyond a well-organized class today, a game won this week, or the achievement of a level of fitness which after six weeks of inactivity may be nothing but a memory.

In meeting the long-range needs of our students we must give them opportunities to acquire the skills and knowledges in the kinds of activities suitable for post-college participation — such as swimming, boating, fishing, golf, tennis, and bowling. A former student of mine, who received an athletic scholarship because of his ability in basketball, was also good enough to get All-American mention as a fullback and receive a contract with a major league baseball team as a catcher. After his first year in baseball, he came back and wanted to learn something about handball and golf. In his request there was an unspoken rebuke for our paying too much attention to his immediate needs during his undergraduate years. This man had rare athletic ability, and was able to satisfy his adult needs for recreation. But, how many of our former students flounder along as novices in adult-type sports, or give up in embarrass-

ment or frustration because their long-range needs were neglected during their undergraduate years? Students should not leave our programs unequipped in terms of their future recreational needs. When they do, we have failed in a major aspect of our responsibility. The challenge to physical education, as an educational experience, goes beyond this week, next term, or the third quarter requirement.

If our work is done well there will be an early satisfactory experience, a number of basic sport skills learned, and feelings of well-being acquired from having achieved a reasonable level of fitness. But even more important, there must be developed in our students an understanding of the values and a desire for continued participation. Skills not used are soon lost; fitness may vanish in less time than it took for its development.

We must help the students of today find the answers to their recreation and health questions of tomorrow. How will they spend their leisure time? Will they be equipped with knowledges and skills permitting them to engage safely, successfully, and with satisfaction in activities of interest to them?

Our responsibility to students, as they seek a college education permitting a full life, goes past a one or two year requirement, and its focusing on immediate needs. Looking beyond their personal needs and satisfactions, we must also see our work as contributing to the strength of this nation's leaders as they assume larger responsibilities in their post-college years.

The true test of physical education, or any other form of higher education is what happens to the individual because of the experience — and not in an element of time circumscribed by this term or next year.

We could not, in good conscience, ask for the costly facilities, the equipment and the time for physical education that we now receive if our contributions were not recognized as having values beyond immediate needs.

GRADUATE PROFESSIONAL EDUCATION — INTERPRETATION AND TRENDS

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Just over a century ago that grand old romantic New England poet,
James Russell Lowell, wrote

New occasions teach new duties,
Time makes ancient good uncouth;
They must upward still and onward,
Who would keep abreast of truth.

For us in graduate education today, these words of Lowell raise the question of whether or not there are "new occasions (which) teach new duties". Are there new occasions in our modern world which compel us to re-examine the traditional doctorates offered by our graduate schools? Should we hold fast to the sacred Ph.D. or should we, as Lowell suggests, go "onward who would keep abreast of truth" by offering the professional doctorate in a variety of subject-matter areas? This, I assume, is the main issue, and certainly it is a timely subject for I have heard it discussed at length at meetings of graduate school deans this fall.

The professional doctorate, as I understand it, is a doctoral degree awarded for a substantial amount of graduate work beyond the baccalaureate degree which entails several years of practical or field experience, numerous courses of both broadening and practical nature and a study or thesis embodying a close examination of some particular problem. Typical of such doctorates are the Ed.D. (at least in most cases), the Doctor of Fine Arts, the Doctor of Business Administration and the Doctor of Musical Arts. There are, of course, several others.

I believe that there are "new occasions which teach new duties" and that our educational society has expanded to such a point that there should be doctoral degrees awarded for graduate work of a professional nature. Not only should such degrees as Doctor of Fine Arts and Doctor of Business Administration be recognized but encouraged. As I see it, there is no reason for us to hold steadfastly to the traditional lines of the Ph.D. Far better it would be to accept new professional doctorates than to bend and twist the Ph.D. to a variety of demands. Far better, for example, would be the degree Doctor of Business Administration for a marketing specialist with a dissertation or study which analyzes a supermarket problem than the degree Ph.D. tortured both with a hit-and-run compliance with the foreign language requirement and dissertation which by no stretch of the imagination could be called a "contribution to knowledge."

Now lest I be misunderstood, I must hasten to add that I would not advocate any lowering of graduate standards, for quality must be preserved in every doctoral degree. Professional doctorates do not necessarily mean lesser or inferior doctorates. Every doctorate awarded should represent the highest standards devised by the leaders in the discipline concerned. Everyone knows that the cheap and easy degree soon degenerates into a travesty and that the institution and departments which grant such degrees quickly lose their reputation and only the inferior graduate students will enroll.

Several questions of real concern are readily suggested by my proposals. First, should there be a doctorate for every subject — a Doctor of Spanish, a Doctor of Mechanical Engineering, a Doctor of Psychology? To this I would answer, "Perhaps so — if the department proposing the degree can defend its program and its requirements — and its graduates — before the court of educational trial." And the defense, let me assure you, would be difficult. At most graduate schools, including Ohio State, the proposal for a new doctorate would be examined minutely and critically by a graduate council or some similar faculty body and subsequently by the university administration and the board of trustees. Continually they would ask these questions: is this degree of doctoral calibre, is this degree sufficiently distinctive to be given a special designation, is this degree worthy of our institution? We can imagine the difficulty in getting a large number of doctoral degrees accepted at our first-rate graduate schools. No, I do not fear the so-called "proliferation" of doctoral degrees.

A second question may readily come to mind, should these professional doctorates be awarded by the subject-matter department, by the college or by the graduate school? I believe that these doctorates should be awarded by the graduate school, chiefly because the graduate school will offer certain safeguards to protect standards and to ensure proper prestige and dignity. Perhaps most important of these is the graduate school's executive committee or graduate council, whose members drawn from all areas of the campus, would guard the standards of the professional doctorate as jealously as they presently guard the standards of the Ph. D. degree.

What, if any, traditional requirements for the doctorate should be retained for the professional doctorate? Certainly the normal three-year period of post-baccalaureate study should be continued, for to require less would remove the degree from the category of the doctorate. As I have indicated earlier, this period of time probably would be extended because the present trend indicates a year or more of practical experience as a requirement for the degree. So too, I believe that the traditional residence requirement — one year on campus — should be retained, for certainly there is something of value to be gained by a year's full-time residence on campus. It is imperative that there be a respectable period of time during which a doctoral candidate comes to know his instructors and his fellow students as well as the library and laboratory facilities. The academic atmosphere is indeed worth preserving for all

doctorates. The days of our graduate school experience should be quiet and thoughtful for it is then that our wells of knowledge are filled. No doctorate should be awarded to students who appear only periodically for courses in a cafeteria-fashion or who hurriedly and breathlessly take courses between a full-time day teaching position and evening employment. Whether or not the foreign language requirement should be retained depends entirely on the nature of the professional doctorate toward which the candidate works. In certain cases the candidate should be able to handle with facility several modern foreign languages; in the majority of cases this facility would perhaps not be necessary. Finally, a dissertation or project study should be required of the candidate for a professional doctorate. Such a study unquestionably would represent the analysis of some practical problem. Two examples might be, first, the interschool administrative problem of a large school system and second, a close analysis of the marketing problems of a frozen food distributor.

A few words are in order concerning the Ed. D. degree as a teaching degree offered by any department of instruction — a Doctor of Education degree offered by a department of English or Chemistry or Political Science. Apparently this concept is steadily developing for I have heard more and more about it in recent meetings of graduate school officials. Perhaps it offers at least a partial answer to the question of where our future college teachers will come from. To me this concept is most appealing for I believe that many students in the so-called subject-matter departments might well spend less time on preparing for a lifetime of highly specialized research and concentrate on preparing for the most satisfying career as a college teacher. Thus many graduate students in such areas as botany, history, political science, English — indeed almost every area — may discover that they really are not interested in research but in teaching, and that for them the Ed. D. degree is desirable. Such a plan might avoid frustrations and embitterments that now all too often exist. Here is a realistic solution to a long-standing problem, a problem which unquestionably will become much more acute in the next few years.

Finally, must we accept Lowell's dictum that "time makes ancient good uncouth" — that is, has time made the Ph. D. "uncouth"? No, of course not. Indeed as our knowledge expands there will be an increasing demand for research persons to push ahead into ever-new realms of knowledge. Certainly in the sciences, in the social sciences, and in the humanities there will continue to be need for persons with the more traditional training of the Ph. D.

PROFESSIONAL PREPARATION FOR RECREATION LEADERSHIP

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Approximately 75 colleges and universities now offer undergraduate degrees in recreation, as compared to 5 institutions in 1938. About 35 institutions offer graduate degrees in this field. Some 2,000 students are enrolled as recreation majors, and approximately 500 degrees in recreation are conferred annually. Thus recreation is assuming an ever more prominent role as a professional field of study.

In spite of the rapid increase in the number of colleges and universities preparing recreation personnel, there is substantial evidence to indicate that present demand for professionally trained recreation leaders exceeds the supply. This situation has created the danger that some institutions may be tempted to establish recreation curriculums even though they do not have sufficient resources to do an adequate job of preparing students for this field.

It is encouraging to note that within the past ten years much attention has been paid to the development of standards and the identification of the needs of institutions of higher learning engaged in the professional preparation of recreation personnel. Some of the more important needs have been identified as follows: (1) the need for providing a qualified faculty to administer and teach the recreation courses; (2) the need for careful selection of recreation students; (3) the need for providing a recreation curriculum which will give the student a broad range of learning experiences; (4) the need for a follow-up procedure to help the recent recreation graduate adjust to his new job; and (5) the need for a continuous evaluation of the recreation curriculum.

QUALIFICATIONS OF THE FACULTY

The director of the recreation curriculum should have a background of broad administrative experience in recreation. His academic qualifications should be at least comparable to those of other staff members holding similar responsibilities and rank in the institution. He should devote full time to the recreation curriculum.

The number of faculty members devoting full or part time to the teaching of recreation courses will depend upon the nature and scope of the curriculum. It is especially important that all of these instructors should have had a good educational background and practical experience

in the specific curricular areas in which they are teaching. The recreation department faculty should have at least the same percentage of persons holding master's and doctor's degrees as is true for the faculty as a whole.

Important factors in the selection of members of the graduate faculty include scholarly attainments, earned graduate degrees, and years of graduate study. Other important factors to be considered are the number and significance of publications and other contributions to the general development of the field of recreation. Members of the graduate faculty should also possess the personal qualities, leadership skills, and professional understandings which will enable them to guide and stimulate students to scholarly achievements worthy of graduate recognition.

All members of the recreation faculty should have a sound philosophy of recreation. They should also hold membership in and contribute to the work of local, state, and national professional organizations. In so far as possible, they should participate in some form of recreation consultant service to local communities for the purpose of keeping abreast of community needs and problems.

SELECTION OF STUDENTS

Even more important than the quality of professional preparation provided is the screening device used in selecting candidates for recreation careers. Before he is permitted to undertake professional study in recreation, the candidate should possess such important qualities as leadership ability, pleasing personality, sound judgment, sociability, initiative, emotional stability, excellent character, and good health. In addition, he should have an understanding of people and a genuine liking for them. These qualifications may be determined by interview, the use of available instruments, and recommendations.

In the admission of students, it is important that the recreation department adhere to academic standards comparable to those of other departments in the institution. Once admitted to the recreation curriculum, the student should be retained only if he continues to meet the academic and other standards required by the institution. The student should have frequent opportunities to discuss his problems with members of the recreation faculty.

The number of students to be admitted to the recreation curriculum will depend upon a number of factors. Among the most important considerations are: (1) the number of qualified faculty members available to teach recreation courses; (2) the total resources of the training institution, including the opportunities for laboratory experiences in recreation within or near the institution; and (3) placement opportunities available to recreation graduates.

UNDERGRADUATE CURRICULUM

The question arises as to how a college or university can determine what to include in its offerings for the professional preparation of recreation personnel. Experience has shown that the best approach to the solution of this problem is to discuss training needs with recreation executives in the area served by the college or university. The training institution should also make a careful research study to determine further the training needs and the resources for setting up a training program to satisfy these needs.

There is general agreement among educators and practitioners in the field that the undergraduate curriculum in recreation should require four years of study. Although the curriculum should be sufficiently flexible to meet the needs of the individual student, it should include courses in general education, recreation skills, recreation theory, and supervised field experience. It is recommended that approximately forty per cent of the total credits required for the bachelor's degree be devoted to specialized recreation courses.

The first two years of the four-year curriculum in recreation should be spent largely in courses which will give the student a broad background in general education. The courses taken during this two-year period should include the following: (1) education courses dealing with teaching methods and techniques; (2) courses in sociology, community organization, and history; (3) courses in the cultural arts, such as arts and crafts, music, drama, and dance; (4) courses in English, public speaking, and literature; (5) courses in the sciences, such as zoology, biology, botany, geology, astronomy, chemistry, physics, and physiology; (6) psychology courses dealing with the characteristics of normal and abnormal behavior; and (7) courses describing the nature and function of recreation.

The last two years of the recreation curriculum should be devoted largely to specialization in recreation. In planning these courses for the final four semesters of undergraduate study, every effort should be made to give the student a well-balanced program which will include both theory and practice. Students should secure a thorough knowledge and understanding of all program areas and should become highly skilled leaders in at least two of them.

Courses in the following areas are recommended for the last two years of the recreation curriculum: (1) skills — arts and crafts, games and sports, dancing, music, dramatics, social recreation, hobbies, and camping and nature activities; (2) philosophy of recreation; (3) survey techniques; (4) administration of recreation; (5) personal and community health; (6) safety procedures and first aid; (7) child growth and development; (8) audio-visual aids; (9) outdoor education; (10) scope and function of the American school system; and (11) methods and materials in recreation.

It is recommended that at least six semester hours in the undergraduate recreation curriculum be devoted to supervised field expe-

rience. This field work gives the student valuable experience and enables the training institution to test him in an actual on-the-job situation. Through his field experience, the student usually performs a valuable service in recreation leadership either in the campus recreation program or in a local public or private recreation agency. The experience should involve observation, participation in group activities, and the leadership of groups of people participating in recreation activities.

The AAHPER has published a helpful guide for the initiation, supervision and evaluation of field experiences in recreation. This valuable handbook may be purchased from the National Office of the Association.

GRADUATE CURRICULUM

The purposes of graduate study are as follows: (1) to produce better teachers, leaders, administrators, and creative scholars; (2) to stimulate and improve the quality of research and its consumption; and (3) to develop specialists who have preparation in particular lines of endeavor beyond the bachelor's degree. If these objectives are to be achieved, the program must provide opportunities, not only to develop competence in subject matter, but also to develop the courage, inventiveness, and imagination of the critical and inquiring scholar. This means that colleges and universities attempting to offer these opportunities must accept the responsibility of providing: (1) a faculty well qualified in both teaching and research; (2) adequate library and laboratory facilities; and (3) the atmosphere of freedom so necessary for effective graduate study and research.

It is recommended that a minimum of thirty semester hours of graduate study be required of students working for a master's degree with a major in recreation. The suggested distribution of this work is as follows: (1) general professional courses, 12-18 semester hours — administration and supervision, finance, surveys, research, statistics, public relations, audio-visual aids, planning of facilities, and program planning; (2) specialization courses, 6-12 semester hours — city planning, administration of camping, industrial recreation, public recreation, private agency recreation, hospital recreation, recreational therapy, and labor-management relations; (3) field work, 2-8 semester hours — internship, field practice, and functional course offerings; and (4) electives, 4-8 semester hours.

IN-SERVICE EDUCATION

Colleges and universities have a definite responsibility for providing in-service education opportunities for on-the-job recreation personnel. These opportunities might include: correspondence, extension, and short courses; workshops; clinics; institutes; consultations; and film, radio, bulletin, and correspondence services.

Personnel attending in-service education programs have included full and part-time recreation leaders, volunteers, public officials, board members, and civic leaders.

FOLLOW-UP OF GRADUATES

After placing the recreation student following his graduation, the college or university has the responsibility of helping him to adjust to his new position. This may best be accomplished by the establishment of a regular follow-up procedure for all graduates.

It is recommended that the follow-up on each recreation graduate be for a period of two years. During this time, both the candidate and his immediate superior should be contacted at regular intervals, preferably through a personal visit from a member of the recreation faculty who is assigned this responsibility.

Accurate records of the follow-up of each graduate should be kept in his personnel file. These records enable the institution to evaluate his progress on the job and are especially helpful to the placement director in considering him for future positions.

CURRICULUM EVALUATION

With the rapid growth of recreation as a profession and the increasing number of colleges and universities offering professional preparation in this field has come a growing awareness of the need for evaluating the training programs provided by these institutions. In 1952, a subcommittee of the National Continuing Committee for the Improvement of Professional Preparation in Health Education, Physical Education, and Recreation prepared, in cooperation with the Committee on Studies and Standards of the American Association of Colleges for Teacher Education, evaluative criteria for the field of recreation. These criteria were contained in the published "Evaluation Schedule in Recreation," which was distributed by the AAHPER and was widely used by institutions for self-evaluation. This schedule was also approved by the AACTE and was used continuously by AACTE visitation teams as a supplement to the AACTE evaluation schedules.

On July 1, 1954, a new national accrediting agency was formed through the help of the AACTE and the National Education Association. This new agency was named the National Council for Accreditation of Teacher Education. It has now received full acceptance and has taken over the accreditation functions formerly performed by the AACTE. The new Council has developed a tentative accreditation guide and tentative standards.

At the request of the Council, a special subcommittee of the National Continuing Committee for the Improvement of Professional Preparation in Health Education, Physical Education, and Recreation is now preparing

a supplement to the Council's tentative guide and standards. This supplement will be used by the Council's visitation teams to evaluate the curriculums in health education, physical education, and recreation. The special subcommittee of the National Continuing Committee is also charged with the responsibility of developing a new set of evaluation schedules which can be used independent of the Council's visitation program by those institutions interested in self-evaluation.

COMMON PROGRAM ELEMENTS IN PROFESSIONAL PREPARATION OF PHYSICAL EDUCATION AND RECREATION PERSONNEL

Allen V. Sabora
University of Illinois

In discussing the problem of common program elements in the professional preparation of physical education and recreation personnel, it may be well to remember that it has been only very recently that it has been recognized that there was really any difference in the preparation of people for work in the fields of recreation and physical education.

Before World War II, the University of Minnesota initiated the first four-year training program leading to the B.S. in recreation. Since World War II, over 60 colleges have instituted a B.S. in recreation. Many of these curricula have been administered in Liberal Arts, some in sociology, but most of them in education or schools of physical education, or some pattern of administrative operation closely related to the physical education curriculum.

Although physical education and recreation are closely related as basic community services, it is important that it be made absolutely clear that the training required for each field, although having many common program elements, is distinctly different in its final emphasis. This fact is, at least in my observation, still not clear to many people. Some people tend to lump the two generally into one field, and feel that preparation in physical education is sufficient in all cases for work in both physical education and recreation. Except perhaps when one thinks of the special operations of sports programs in recreation, this is definitely not the case. Preparation in recreation requires a distinct background, quite different in many aspects from that required for physical education, although at many points preparation for the two fields has many common elements.

It should be pointed out that there are some particular factors which influence the common elements any student might experience in preparation for physical education or recreation:

1. The minor area selected by the student. If the physical education minor elects political science or economics as a minor, he would be better prepared for recreation; conversely, if a recreation major elects a sports minor, his work parallels that of the physical education student a great deal more. On the other hand, if a recreation major selects a hospital recreation minor sequence, such preparation in recreation gravitates far away from the physical education pattern.

In some recreation curricula offered in teachers colleges, students in recreation are required to take a minor in education. In such a curriculum, the recreation major and the physical education major would have more common program elements in their preparation than in institutions where recreation majors do not follow a teacher training sequence in obtaining a B.S. in recreation.

2. The field work (practice teaching) selected by the student. If a recreation major elects a public recreation or park department, a hospital, community center or voluntary agency for field work, his background and experience will differ widely from the physical education student who is required to teach in a public elementary or secondary physical education department. Very few recreation majors ever do field work exclusively in a school setting; neither is their field work experience confined to sports and physical education activities, but rather to more inclusive experiences in a variety of leisure time activities in various settings throughout the community.
3. The type of informal experiences the student has had before entering college, and the voluntary and paid work done by the student in the physical education and recreation fields while in college has a great deal to do with the student's ultimate ability to perform professional work in either physical education or recreation.

In order to show these common elements in the preparation of physical education and recreation personnel, it seems quite necessary to also point out areas in which preparation for these two fields categorically differs. Perhaps the most significant way to do this is to first relate what the ultimate job of the physical educator and the recreationist is, and the differences in function that they have in carrying out their work in the community.

Statement of Job Analysis — Physical Education

Physical education teacher and coach
Physical Director, Community Center

Statement of Job Analysis — Recreation

Recreation Director, small community
Community Center Director
Park and Recreation Superintendent
Hospital Recreation Therapist

Sample Job TitlesRecreation

Superintendent of Parks & Recreation
 Supt. of Recreation
 (city or voluntary agency)
 Asst. Supt. of Parks and/or Recreation
 Supervisor of Recreation
 Community Center Director
 Supervisor or Director Industrial Rec.
 Recreation Therapist
 (hospitals and other institutions)
 Recreation Specialist:
 Arts and Crafts
 Dramatics
 Music
 Sports
 Social Recreation
 Outdoor Educ. & Rec. (including camping)
 Industrial Recreation
 Aquatics

Physical Education

Director of Athletics and Physical Educ.
 Director of Athletics
 Director of Physical Education
 Supervisor of Physical Education
 Coach, Varsity Sports
 Director of Intramural Sports
 Supervisor, Exercise Therapy
 Teacher, academic subjects:
 Health Education
 Safety Education
 Mathematics, History, Civics,
 Industrial Arts, etc.

Common to Both Areas

Sports Specialist
 Boy Scout Executive
 Camp Director
 Industrial Recreation Director
 Physical Director, YMCA, etc.,

Source Area MinorsRecreation

Arts and Crafts
 City Planning
 Drama (Speech)
 Hospital Recreation
 Industrial Recreation
 Music
 Outdoor Educ. and Camping
 Public Relations

Physical Education (Teaching Subjects)

Education
 Health Education and Safety
 Social Science
 History
 Political Science
 Economics
 Biology
 Mathematics

Rural Recreation

Physical Sciences
English

SUMMARY

- 1. Although preparation in physical education and in recreation requires biological sciences, physical education curricula usually require more than twice that required in preparation for recreation.
- 2. Conversely, recreation curricula usually require more than twice as much training in the social sciences as is usually found in physical education curricula.
- 3. It is in the general courses that preparation in physical education and recreation overlap most. The subject areas usually common to both areas are:

Orientation	Hygiene	Speech
Rhetoric	First Aid	American History
	Psychology	

Points of difference in general courses involve recreation curricula requiring philosophy, journalism, expository writing, and economics, which are usually not required in physical education curricula.

- 4. In professional courses, the recreation curriculum includes a heavy concentration in the fine arts and humanities. Skill courses in music, informal drama, arts and crafts, advanced study in outdoor education and recreation, dance and social recreation are rarely required in physical education. The physical educator receives a strong preparation in techniques of performing and teaching specific sports skills; the recreation leader gets only slightly more training in sports than in music, drama, or other special interest areas of the recreation program.
- 5. Principles and philosophy in both physical education and recreation differ. The field of formal education and organized informal participation (athletics and intramurals) differs considerably from the informal education atmosphere of the playground, community center, park, hospital or similar setting. Consequently, although there is an overlapping or introduction necessary to students in both fields, there is necessarily a philosophy as well as principles distinct to physical education and to recreation that require separate treatment in preparation of professional personnel.
- 6. The physical educator requires special preparation in the organization of sports activities particularly. This preparation is, of course, bound closely to school administration and limited by the total operation of

the school in both the formal physical education program and the interscholastic sports and intramural programs.

Administrative preparation for the recreation worker necessarily involves a somewhat broader concept and the recreationist is less a specialist and more of a manager and supervisor of a variety of leisure time activities in different settings in the community.

- a. He works directly with a lay board and must know general board-superintendent relationships.
 - b. He must account for funds, make budgets and develop a fiscal procedure much like that set up by a superintendent of schools.
 - c. He must be well trained in planning and care of physical facilities and equipment for all types of leisure time activities. This means training in Landscape Architecture, maintenance of indoor and outdoor areas, design of areas, and the relations of physical facility planning to the over-all community master plan.
 - d. He must be trained in public relations and know how to deal effectively with all levels and all groups and individuals in the community. Dealing with voluntary participation, the recreation director must be skilled in public relations or his program will suffer considerably.
7. Preparations for physical education and recreation differ considerably in practice teaching and field work experiences. Again there is a broad floor of basic activities in each area that are fundamentally the same. On the other hand, the specific experiences — that of practice teacher in a school physical education system and that of recreation field worker in a public park, city recreation department, hospital or similar recreation setting — differ widely in subject matter, work performance and general scope, and prepare the trainee in the main for distinctly different types of jobs in the fields of physical education and in recreation.
8. In source area minors, the gap between common program elements in preparation for physical education and recreation personnel widens. The physical educator generally selects a minor related to teaching in the public schools such as health, history, mathematics and the like. The recreation trainee usually specializes in a skill area such as arts and crafts, drama, music, or prepares for recreation work in a particular setting by taking an appropriate minor necessary for specialized work in industrial recreation, hospital recreation, group work or similar setting.

SHOULD COACHES BE CERTIFIED IN PHYSICAL EDUCATION?^{1/}

The author contends that
a recent nationwide survey reveals
they "should be" but usually aren't.

Don Adee
Ft. Hays Kansas State College

Dr. Adee is president-elect of the Kansas Health, Physical Education and Recreation Association and Chairman of the Division of Health, Physical Education and Recreation at Fort Hays Kansas State College.

Should coaches of athletic teams be certified in the field of physical education?

The Kansas Health, Physical Education and Recreation Association has been concerned with that question for some time. Recently this organization made a recommendation to the Certification Division of the State Department of Public Instruction requesting that athletic coaches be certified to teach physical education.

It is reasonable and logical to require coaches of interscholastic athletics to be certified to teach physical education. It is also reasonable and logical to require coaches to be so certified whether they teach physical education classes or not. These statements are not as far out in left field as they first appear. The statements are reasonable because they represent the next logical step in the reasoning of the Educational Policies Commission of the National Education Association.

NEA Defines Athletics

In its publication, School Athletics,^{2/} the NEA has gone on record as defining athletics as a part of physical education and physical education as an integral part of education. It seems very simple to conclude that if athletics is a part of physical education, then coaches should be certified to teach physical education. This is not the only conclusion that can be drawn, but neither is the NEA's definition the only reason for drawing it.

Convinced that Kansas' problem was not unique, the president-elect of the KHPERA sent out a questionnaire to the certification officers of the 48 states, the District of Columbia, and U. S. territories. Almost every state officer — all but two — answered the query.

^{1/} The following article is printed as it appeared in the KANSAS TEACHER, November, 1956.

^{2/} National Education Association, School Athletics, NEA: 1954.

Although only 18 states require certification of coaches in the field of physical education at this time, 41 responded that they felt coaches should be so certified.

What State Officers Say

Indicative of the opinions of state officials was this reply from Thomas J. Holmes, Assistant Superintendent of Public Schools for the District of Columbia: "We believe the emphasis should be on physical education — not on athletics. All our coaches are hired primarily as teachers of health, physical education and safety and are assigned coaching duties as required."

More emphatic was Luther J. Black, Secretary of the State Certification Board for Illinois. Mr. Black wrote, "Since physical education is closely related to athletics, I can't imagine a coach doing a satisfactory job unless he has a physical education background and training."

Russell H. Leavitt, Chief of the Division of Instruction of New Hampshire, was concerned with the health of the young people of his state and said, "Physical education teachers have had a type of training which will give better protection and better training to our youth. New Hampshire regulations are being revised."

In Maine certification is not required, but Quenten R. Unger, Director of Health and Physical Education for that state's Department of Education, asserted: "If we concur with the NEA Educational Policies Commission that inter-scholastic athletics is part of the physical education program, any coach should then be required to have a philosophy of physical education. With such a philosophy any coach should better understand a boy — what he is and how he works. Too many coaches don't know this. I think reasonable certification should be required."

Former Specialist in Teacher Education for California and now Director of Teacher Education at the University of California, James C. Stone, declared: "Of course coaches of athletic teams should be certified in the field of physical education." And he asked, "What educator would think otherwise? Isn't coaching an integral part of the physical education program?"

Not all state officials favored certification; however, only five states indicated they did not desire it. Typical of the few negative responses was New Jersey's Assistant in Physical Education and Athletics, Everett L. Hebel: "Because of the expansion of the athletic program in our schools, it is necessary to have other teachers assist or be head coaches. Using academic teachers in coaching has given an opportunity for schools to have large squads under supervision."

We would not disagree with Mr. Hebel's reasoning, provided the "Academic" teachers who double as assistant or head coaches are qualified for such work by meeting certification requirements in the field in which they coach. I can't imagine our tolerating for long a situation wherein unqualified persons guide our more talented youngsters in other areas of education, such as music.

The response from the questionnaire indicates that most states are

working in what we believe to be the right direction, although the problem is not licked yet. The survey showed that a state average of 31.2 per cent of the coaches in the U.S. were not certified to teach physical education. This is not surprising as over 50 per cent of the coaches in the U.S. are not physical education teachers in the sense that they teach classes. If, however we go along with the definition as presented by the NEA, we must agree that athletics is a part of physical education. Therefore the coaches should meet the minimum certification in physical education.

The Questionnaire

The questionnaire^{1/} was divided into two parts: the first part was designed to gather facts about certification requirements; the second part was an opinion poll designed to find out whether state certification officers thought (1) coaches should be certified and (2) athletics should be a part of physical education. The results of the survey were interesting and significant to those proponents of the idea that Kansas should act on the recommendations of the NEA Educational Policies Commission.

The tabulation of the answers of the state officials revealed:

The number of states requiring certification — 18

The per cent of coaches not certified to teach physical education — average 31.2 per cent per state.

The percent of coaches not teaching physical education — average 53.5 per cent per state.

The result of the opinion poll:

Should coaches be certified to teach physical education? — 42 yes, 5 no.

Should athletics be a part of physical education? — 44 yes, 1 no.

The Recommendation for Kansas

The KHPERA recommended that the Certification Handbook be revised. Where the statement — "There are no preparation requirements for coaches other than qualifying to teach in the position held" — appeared, the Association requested the following:

"Coaches of interscholastic athletics are considered teachers of health and physical education, and as such, they must meet the requirements for certification in the field of physical education."

This recommendation represents sound education policy if we are to accept the reasoning of numerous educational groups working with the

^{1/} Copies of questionnaire and survey results sent upon request. Address Dr. Don Adey, Chairman, Div. of HPER, Fort Hays Kansas State College, Hays, Kansas.

nation's leading professional education organization, the NEA and its Educational Policies Commission.

Kansas certification authorities should act in the best interests of Kansas children and youth by requiring coaches of athletics to be qualified in the physical education area in which they perform as educational leaders of children and youth.

Certainly Kansas youth are as entitled to a fair deal in all phases of education as the youth of the states now requiring certification of those conducting their athletic programs.

EDITOR'S NOTE: The reader will be interested in the reaction of Floyd Herr, Director of Certification and Accreditation, State Department of Education, to Dr. Adee's suggestion. He comments as follows:

"The viewpoint expressed in Dr. Adee's article is timely and important. There are two observations, however, by way of clarification, which should be made.

"First, it should be borne in mind that Kansas is one of 17 states which issue general or blanket high school certificates; that is, these general certificates do not carry endorsements of the teaching fields or subjects for which the holder is qualified. There are prescribed preparation requirements which holders must meet to be authorized to teach certain fields and subjects. These requirements are enforced by the employing school officers and by accreditation policies of the state department and the North Central Association.

"Second, expert opinion would agree that coaches should have adequate preparation in the field of physical education. The moot question here would be what constitutes adequate preparation, whether completion of a major, or a minor, or less should be required. On this point we believe that there would not be general agreement. There is some evidence of a swing away from over-specialization and toward greater breadth in state certification specifications for high school teachers. This question deals with the difficult and complex problem of teaching assignments about which we need much more information and research."

THE RECOMMENDATIONS FOR THE COLLEGE PHYSICAL EDUCATION ASSOCIATION AND TEACHER EDUCATION INSTITUTIONS

- I. Publicly state that we have long believed athletics to be only one phase, but a very important one, of physical education and physical education an integral part of education.
- II. Take an active part in inaugurating certification requirements for

coaches in those states (30) where no specific preparation of physical education is required.

III. Compliment the National Association of Intercollegiate Athletics (NAIA) for their leadership in attempting to establish the following aims and objectives for their organization.^{1/}

- a. That intercollegiate athletics should be an integral part of the total physical education offering of a college and not a separate organization with different principles, aims, and objectives.
- b. That the program of intercollegiate athletics offers the participants valuable educational experiences not provided in other phases of the physical education program.
- c. That the major emphasis of the program of athletics should be instrumental in educating the participants and other students in moral and ethical values inherent in the program.
- d. That the department of physical education, of which intercollegiate athletics is an integral part, should have a place in the institutional structure comparable to that of any other department; that it should be subject to the same institutional policies, budgetary provisions, and controls, as are all other departments of the college; and that members of the faculty of the department should be selected in the same manner and have the same rights, privileges, and responsibilities as other faculty members of comparable rank.

IV. Recognize the fact that not all of our own teacher education institutions require their college coaches to be prepared in physical education. Speculate that this fact may be in part responsible for the difficulties -- not compatible with sound educational philosophy -- which intercollegiate athletics have encountered over the years and more noticeably in recent years.

V. Cooperate on establishing minimum standards for the preparation and certification of coaches of athletics who do not intend to teach the other phases of physical education.

^{1/} NAIA Aims and Objectives Committee, communication to presidents of member institutions, 1956.

COMITTEE REPORTS

REPORT OF THE COMMITTEE ON CONSTRUCTION AND EQUIPMENT

During the past year the Committee on Construction and Equipment has been considering several approaches to the many problems confronting Colleges and Universities. Several ideas have been studied. Some of the ideas have developed into rather complex projects as correspondence has accumulated and other interested persons have contributed. Some of the ideas follow:

1. It has been suggested that the blue-prints of gymnasiums and sports facilities be reduced by photography to a uniform size (8" x 11-1/2"), mimeographed and distributed to libraries and interested schools. Special features and worthwhile suggestions would be left to the discretion of the person experiencing the problems of building or of using the facilities. The individual schools would accept responsibility for the mimeographing process and expenses.
2. Multi-lithing and/or micro-filming processes were suggested following the pattern stated in Number 1. Either plan would require a central processing center and funds.
3. Micro-cards were suggested with the possibility of distribution from a central source and on a fee basis.
4. A final suggestion was to revise the CPEA, COLLEGE FACILITIES FOR PHYSICAL EDUCATION, HEALTH EDUCATION AND RECREATION.

Due to the fact that some of these suggestions have become complicated and would involve funds, the Committee has deemed it advisable to make this a continuing project. The Committee solicits your cooperation in developing a descriptive list of gymnasiums and sports facilities by states that have been built in the last ten years. It is then planned to select outstanding examples of varied types of facilities and other pertinent information for transposition to some permanent form. As a result, the Committee hopes to devise a plan and secure funds so that the plans and pertinent information can be made available to anyone who is interested in their use from a central depository.

Respectfully submitted, S. L. Cooper J. C. Loveless
Dean Trevor Rix N. Yard James W. Long, Chairman

CURRICULUM RESEARCH COMMITTEE

Annual Report
1956

Curriculum Research Committee Members:

Karl W. Bookwalter, Indiana University
Ellis H. Champlin, Springfield College
H. Dan Corbin, Lock Haven (Pa.) State Teachers College
Ross D. Merrick, Southern Illinois University
John E. Nixon, Stanford University
Wesley M. Staton, Wayne State University, Chairman

Sub-Committee on Objectives Members:

Karl W. Bookwalter, Indiana University
Hubert E. Brown, University of Hawaii
Wayne H. Crawford, University of California (Riverside)
C. Frazier Damron, University of Florida
Richard J. Donnelley, University of Minnesota
J. Wynn Fredericks, University of Southern California
Glenn W. Howard, Queens College
Hartley D. Price, Florida State University
G. Lawrence Rarick, University of Wisconsin
Frank F. Sabasteanski, Bowdoin College
Donald J. Salls, Alabama State College (Jacksonville)
Leroy G. Seils, Texas Western College
Emory W. Seymour, Springfield College
Carl H. Young, University of California (Los Angeles)

During the past year the Committee and the Sub-Committee have been concerned entirely with the furtherance of the project aimed at the development of specific outcomes, or control objectives, for activities of the physical education curriculum for senior high school boys. A form, providing the medium for delineating and elaborating objectives, had previously been developed in 1955 by the Sub-Committee on Philosophy.

Early in 1956 the Committee agreed that efforts should be concentrated on the objectives project already begun by the Sub-Committee. Accordingly, Committee members joined the Sub-Committee group in accepting responsibility for preparing outlines of control objectives for various physical education activities. In order to broaden the base of active participation by Association members, and to amplify the diver-

sity of special interests and competencies, the membership of the Subcommittee was substantially increased.

While there are certain limitations to the elaboration of objectives by a national group, it is felt that the outlines are specific enough to be useful yet not so detailed as to be restrictive to good teaching in the local situation.

Specific major outcomes, in terms of conditions, skills, knowledges, and attitudes, for a variety of activities of the physical education curriculum are set forth below. It is planned to develop objectives for additional activities during the current year.

REPORT OF THE STANDING COMMITTEE ON FOREIGN RELATIONS

Earle F. Zeigler
University of Michigan
Ann Arbor, Michigan

This Committee is continuing the plan of action adopted three years ago:

1. Continuance of a working arrangement with the Committee on International Relations of the AAHPER to avoid any duplication of effort. We are contributing also to the work of the Joint Council on International Affairs.
2. The distribution of a newsletter periodically. In August 1955 one hundred and fifty newsletters were sent to one or more physical educators in each of 67 countries. When a sufficient body of information is gathered, a second newsletter will go out to our own members. Pertinent information received from other countries will appear in abridged form in our Proceedings.
3. The preparation of a program for our Annual Meeting each year. In 1953 the program was devoted to Canada, 1954-Australia, 1955-Egypt, and this year Wes Weston, of the Rice Institute, gave an illustrated slide lecture on Italian Physical Education. Future program contributions are welcomed.
4. The establishment of a continuing correspondence with physical educators in other lands. We have a working list of over 250 names and would welcome additions.
5. A questionnaire survey was conducted to determine what foreign physical education films are available in the United States. We would appreciate your co-operation in this effort.
6. Through our efforts partially some material on foreign physical education appears in each issue of the JOURNAL. Your chairman has accepted the post of Editor of the International Scene Column.

We feel that this plan of action is a feasible one within our limits of time and money. It should be possible to enlarge our scope gradually. We would like to learn the following information:

1. Which of our members are corresponding regularly with foreign physical educators? (To avoid duplication)
2. What are your recommendations for a bibliographical commentary of our basic texts? Our plan is to prepare a list that can be distributed upon request.

Respectfully submitted,
L. M. Fraley, Univ. of Maryland
John Heldman, Univ. of Louisville
W. S. Vandenburg, Fresno St. College
H. N. Neilson, Hampton Institute
A. Weston, The Rice Institute
Harley Price, Florida St. Univ.
E. F. Zeigler, U. of Mich. (Chairman)

HISTORICAL RECORDS COMMITTEE
REPORT, December 1956

During the past year certain historical materials belonging to the association were received at the Paul Klapper Library of Queens College. These materials are being prepared for cataloging and listing.

A proposed operating code was submitted to the Chairman of the Committee to set up such codes.

Discussions have been held with James Long, Chairman of the Committee on Construction and Equipment, relative to the use of the central repository for the housing and distribution of selected materials on facilities.

Among the historical documents in the Klapper Library are the early Minutes of the Association. Because these minutes are typewritten, and there is only one copy of them, this Committee recommends that these minutes be placed on microfilm.

The Committee further recommends that the Executive Council be empowered to approve expenditures of money to pay for microfilming; and that the amounts to be expended, if any, be determined by the Executive Council.

It is further recommended that the Klapper Library be placed on the mailing list of the Association to receive gratis annually two copies of the Proceedings.

The Committee is desirous of building the historical documents and articles collections, and urges members who possess such items and who are willing to contribute them to the Association to send them to the Paul Klapper Library, Queens College, Flushing 67, N.Y., marked for the College Physical Education Association.

Respectfully submitted,
J. D. Begelman
H. H. Clarke
J. W. Masely
G. W. Howard, Chairman
W. J. Baughman
H. G. McCurdy

December 28, 1956.

REPORT OF THE COMMITTEE ON INTRAMURAL SPORTS

The committee on Intramural Sports reports the completion of a very active and successful year.

The objectives of the Intramural program are in the process of completion or are recognized as problems which need further study.

The objectives of the program were three-fold:

1. To select recommended problems agreed upon by the members and to develop these problems through a questionnaire survey method and to present the findings at the annual meeting.
2. To provide, develop and carry through research about "on the job" intramural problems which might improve the status of intramural programs in our schools, colleges and universities.
3. To continue to improve the National College Touch Football rules through studies of the rate of injuries, rule changes, etc.

Mr. Rod Grambeau, Editor and Chairman of the National College Touch Football Rules Committee reports that on September 24, 1956 the supply of handbooks was exhausted and immediate action must be taken. The Athletics Institute had to be informed by July on changes in order to commence publication. Since a joint effort of revision cannot be done within a few months, it was agreed, with the approval of Ernest Smith, president of the CPEA, to order sufficient copies with a few minor changes to last for a period of two years. Therefore, the Athletic Institute was duly notified and the proposed action was taken.

I wish to express in this report my sincere thanks to Rod Grambeau, Secretary of the Intramural Section, and to all members of the Committee for their splendid cooperation.

Respectfully submitted,
H. R. Ryan, McGill University, Chairman
Rod Grambeau, University of Michigan
Victor Moore, Kent State University
J. A. Glascott, University of Pennsylvania
E. J. Tyrance, Howard University
P. V. Keen, University of Oklahoma

MEMBERSHIP COMMITTEE

The membership committee conducted an intensive drive during the year. All institutions not having members in the association were contacted, follow-up letters were written, and some 350 application blanks were mailed out upon request.

Approximately 100 new members have joined the association during the current year, the largest number ever to take out membership during a single year. Congratulations as well as the services of our Association are extended to all of these new members.

The members of the committee are to be commended for their fine efforts in behalf of the association.

Respectfully submitted,

A. C. Zuaro, New York University, Chairman

CPEA NECROLOGY COMMITTEE 1957 REPORT

1. The business of the 1957 Necrology Committee included the writing and submission of an operating code. The suggested code was sent to Professor Lewis A. Hess, Chairman of the Committee on Operating Codes.

2. Active CPEA members in each of the forty-eight states, the District of Columbia, and Canada were contacted and requested to submit the names of CPEA members who had died during the current year. Two such names were secured:

Leon George Kranz
John J. Sellwood

3. On December 3rd, a former colleague of each of the deceased members was written and was requested to submit information concerning the deceased member. In each case the information was sent and it has been attached as a major portion of this report.

Respectfully submitted,
Guy W. Nesom, Chairman
Lloyd Olds
E. C. Davis

ACADEMIC SENATE MEMORIAL RESOLUTION

JOHN J. SELLWOOD
1916-1956

Dr. John Joseph Sellwood, Associate Professor of Physical Education on the Los Angeles Campus, died on October 5, 1956. He is survived by his widow, Mrs. Mary Y. Sellwood, and two sons, Michale, 12, and Jeffrey, 10.

Dr. Sellwood was born on November 6, 1916 in Portland, Oregon. He attended the Oregon Normal School, the University of Oregon and San Diego State College, receiving the A.B. degree from the latter in 1941. He earned an M.S. degree in physical education and social studies from the University of Southern California and the Doctor of Education degree from the University of California, Los Angeles.

After a varied teaching experience in public and private schools and leadership in youth camps, he became assistant professor at San Diego State College. From 1942 to 1945 he served in the Navy and attained the rank of Lieutenant Junior Grade. In 1948 he joined the faculty at UCLA

where he rapidly became known for his remarkable personal and professional qualities as a leader among men and women, boys and girls.

Dr. Sellwood was admired by his professional colleagues for his insight and his depth of beliefs about the role of education in the lives of disabled people and his concepts about the meaning of human movement in the lives of all people.

A gifted, dedicated and exacting teacher he was warmly sensitive and alert to the needs and interests of students. In the classroom and in his day-to-day relations with students, he inspired trust and affection and he encouraged noble aspirations. He was ever mindful of the capacities of humans to grow and to learn and he was ever realistic to the desires and personal needs of individuals.

His influence and guiding hand reached beyond the classroom and the campus. His strong public concerns led him to assume many leadership responsibilities in which he served his profession and his community with distinction. He was active in Phi Delta Kappa, national education fraternity; Phi Epsilon Kappa, national physical education fraternity; the National Education Association; the Association for Physical and Mental Rehabilitation; the Association for Student Teaching; the American Association for Health, Physical Education and Recreation; and the Southwest District Association for Health, Physical Education and Recreation in which he was Vice-President-Elect. He devoted much of his leisure time to work with physically handicapped children. He was a consultant to the Los Angeles County Crippled Children's Society and in recent summers was program director of a camp for physically handicapped persons. He was in Boy Scout work and in the activities of the Holy Faith Episcopal Church, Inglewood.

It is seldom, indeed, that the passing of a leader has aroused a more general and sincere sorrow and deep sense of personal loss. He was more than a good father, husband and citizen who always carried his responsibilities with a scholarly approach, a moving spirit, a lofty devotion, a deep sense of humility, boundless and contagious enthusiasm, and great courage. He was to all a tower of strength, a counselor, a friend for whom many had a deep and abiding affection. His untimely death is an irreparable loss to his family, his friends, to the University, and to the profession he so ably represented.

Valerie V. Hunt
David F. Jackey
Ben W. Miller

IN MEMORIAM
LEON KRANZ
1894 - 1956

Leon Kranz, Professor of Physical Education and Chairman of Department at Northwestern University, died September 29, 1956. He is survived by his widow, Mrs. Gerta Kranz, and his daughter. Professor Kranz was born February 8, 1894, at Columbia, Pennsylvania. He re-

ceived his B.P.E. from Springfield College and his M.S. from Northwestern University.

Leon Kranz possessed a dynamic personality and lovable character. He was a great scholar, lecturer, writer and teacher, who dedicated his life to physical education, believing sincerely that higher education had a solemn obligation to offer the best in this field.

In this meeting today there is a note of loneliness. It might even be a note of emptiness, too, if it were not for the permeating and vivid impressions that we carry of the man whose memory we are honoring. We miss Leon Kranz in person — yes; but our remembrances of him are with us here and now as we pay tribute to him. We esteem the privilege of having known him as a friend, of having worked with him as a colleague, and of having benefited from his leadership in physical education.

Leon Kranz exemplified the best in his chosen profession. In his appearance, in his convictions, in his loyalties, in his athletic expertness, in his teamwork, he was always the true physical educator. He believed in his work and welcomed the responsibilities that went with it.

More informally, Leon Kranz was always "Leon" to our small group assembled here. We looked forward to seeing him, anticipating his friendly smile, his merry joke, and his quiet laughter. There was never any sting or sharpness in his wit. It was always kindly. He was constructive in his thinking and his remarks. In short, Leon was a person one was glad to see.

Leon seldom talked much about himself. He was more interested in what the other fellow was doing. But it wasn't hard to turn the conversation to golf, skiing, bowling, gymnastics, and travel. True, his work came first and then his professional and community obligations. But with them taken care of, he turned his enthusiasm to his avocations, which, in his case, were sports. He was not only proficient in them — he was an expert and a champion. His love of sports fortunately gave him the opportunity for travel, and here again he was an enthusiast. His favorite project was the taking of a student group on an annual vacation skiing trip. On these excursions, Mrs. Kranz, also an expert skier, accompanied them. These trips took them to the Laurentian Mountains of Canada, to the Alps in Switzerland, and to Sun Valley in our own United States. Looking ahead in his love for travel he had plans to take a student group to the 1960 Olympic Games in Rome, Italy. He had previously attended the Olympic Games at Helsinki in 1952.

These recollections are those which come out of my personal friendship with Leon. I know that you all have your own memories of him and that you likewise treasure them.

Speaking more impersonally, I should recall to you that Leon had an Eastern background. He was born at Columbia, Pennsylvania in 1894, graduating from high school at Coatesville, Pennsylvania in 1931, and from Springfield College in 1917. He received his Master's degree from Northwestern University in 1932. He was married to Margaret Schultz in June, 1923 and he had one daughter, Greta Lee. After serving as Instructor, Assistant Professor, and Associate Professor of Physical

Education at Northwestern University during the years 1921 to 1933, he was appointed Professor and Chairman of the Department in 1933, a position he held until his death in September of this year (1956). During World War I he served as 2nd Lieutenant in the U. S. Air Force and as flying instructor. His community spirit is shown by the fact that he was President of the Council of Social Agencies of Evanston, Illinois — his home — for the two years of 1946 to 1948; that he was a member of the Kiwanis Club, of the Masons, of the Evanston Club, of the Northwestern University Club, and of the American Legion. His church affiliation was Episcopalian. His professional spirit is similarly shown by his being a member of the National Education Association for Health, Physical Education, and Recreation (life member and member of the Executive Committee); and of the Mid-West Physical Education Association, of which he was a pioneer member and later President. The Mid-West Association enjoyed one of its most successful years under his leadership. Moreover, he served on many important professional committees. He was the author of two textbooks, Personal Hygiene, completed in 1932, and of a Kinesthology Manual, completed in 1948.

From this personal biography we turn again to the Leon Kranz that we knew so intimately. Today, we miss his presence, we feel his loss. But we can partially assuage our sorrow by focusing our thoughts upon the intangible gifts that he has given us. Our lives have been enriched by having known him and respected him. And the graciousness of Leon's personality extends beyond us to wider circles in the field of Education. This recognition of his wider influence was given expression in a letter from Dean E. T. McSwain of the School of Education, Northwestern University, from which the following two paragraphs are quoted:

"It is most difficult for us to realize that our professional colleague and personal friend for many years has passed away. We hold in high esteem the outstanding leadership that he has given in the field of Physical Education and Health during his many years of service as a member of the faculty at Northwestern University.

"We shall make every effort to continue to move forward the program in Physical Education and Health that was developed at Northwestern University under Mr. Kranz' leadership."

There is comfort in this pledge by his faculty colleagues at Northwestern University that the work so well begun by Professor Leon Kranz, our colleague, and by Leon, our friend, will be carried on to its full fruition.

In closing, I am reminded of climbing the mountain paths of the Tyrol in Austria when the little children one met would curtsy and say, 'Griise Gott,' and it meant "God's Greetings." For you, Leon, we say with our hearts, "God be with you."

NOMINATIONS

Mr. President and Members of the College Physical Education Association:

Your committee has studied the list of members of this association very carefully in an effort to present to the assembled delegates a slate of officers that will furnish vigorous, able and intelligent leadership. The committee in compliance with Article IV-Section 1 of the Constitution of the Association therefore submits for your approval the following slate of officers:

- | | |
|--------------------------|---|
| President-Elect: | L. C. Adams, Columbia University
A. A. Esslinger, University of Oregon
J. H. Shaw, Syracuse University |
| Council Member-at-large: | E. C. Davis, University of Southern California
C. O. Jackson, University of Illinois
K. J. McCristal, Michigan State University |
| Secretary-Treasurer: | R. E. Jamerson, University of North Carolina |

In the case of the Secretary-Treasurer we have followed the interpretation of the previous nominating committee, and have thus only nominated one person.

Respectfully submitted,
Paul Hunsicker, University of Michigan, Chairman
K. C. H. Oermann, University of Pittsburgh
Carl Nordly, University of California

COMMITTEE ON OPERATING CODES
ANNUAL REPORT, 1956

During the past year this Committee has been quite active in reviewing and recommending changes in most of the operating codes of the various Continuing, Standing, and President's Committees of the Association.

Committee chairmen have been contacted and have been asked to arrange their codes in what we hope will be a standardized form and insofar as possible strive for compliance with Article VIII, Section 4 of the Constitution.

At this time the Committee is presenting the following codes for approval or rejection to the Executive Council:

Committee on Membership
Committee on Foreign Relations
Committee on Construction and Equipment
Historical Records Committee
The Policies Committee
The Necrology Committee
Committee on Operating Codes
The Nominating Committee

Respectfully submitted,
C. L. Adams, Columbia University
C. J. Alderson, University of Texas
G. C. Anderson, A.A.H.P.E.R.
H. A. Scott, Columbia University
R. A. Snyder, University of California
at Los Angeles
L. A. Hess, The Ohio State University, Chairman

COMMITTEE REPORT
PROBLEMS OF COLLEGE PHYSICAL EDUCATION

TO: The President and the Executive Committee, College Physical Education Association

FROM: The Committee on Problems of College Physical Education

1. Some personnel changes on the problems committee were made following the 1955 meeting. Committee roster is attached. It was decided that the 1956 program should include reports from each of the committee members on the subject: "What are the problems faced by our profession because of increased enrollment for the next ten years?" Each committee member was requested to prepare a statement for his particular area.
2. The work of the committee during the 1955 period consisted of the following activities:
 - a. Each committee member was contacted by the Chairman and asked to suggest doctorate research that should be reviewed at the annual College Physical Education Association Meeting.
 - b. Correspondence was carried on with members of the committee and others interested in problems of college physical education.
 - c. Students were advised on the selection of studies consistent with the reports of the Problems Committee.
 - d. Requests were acted upon for support of the C.P.E.A. in connection with proposed studies.

Respectfully submitted,

Karl Oermann
B. H. Massey
Arthur Esslinger
Ray Duncan
Carl L. Nordly
William Hughes
Don Cash Seaton

H. Leibee
Raymond Snyder
C. H. McCloy
J. W. Fredericks
William Meredith
Harry A. Scott
A. W. Hubbard

Charles A. Bucher, Chairman

REPORT OF SERVICE COURSE COMMITTEE

A meeting of the committee was called at the Conrad-Hilton Hotel in Chicago during the National Meeting of the American Association for Health, Physical Education and Recreation. Plans were laid for the two section programs of the College Physical Education Association meeting in Columbus on December 27 and December 29, 1956.

Reports from all sections of the country indicate that service course programs face many problems. Two of these problems were discussed at length at the national meeting.

1. Immediate Needs in Sports and Exercise vs. Education for Future Needs in Physical Recreation

2. Co-education in the Service Curriculum for College Students

Two events during the year appear to have great significance with respect to the service program.

- a. President Eisenhower's Conference on Physical Fitness held in June at Annapolis

- b. The American Association Conference on Physical Fitness held at Washington, D.C. in September.

Soon to be released will be the results of a nationwide study, "A Survey of Opinions and Program Practices Concerning Co-educational Physical Education in Colleges and Universities": by Dorothy Fornia, Long Beach State College, Long Beach, California.

Respectfully submitted,

E. M. Allen

T. E. Blesh

J. O. Jones

H. E. Kenney

H. E. Leibee

M. C. Wakefield, Chairman

RESOLUTIONS COMMITTEE

WHEREAS this has been a highly successful convention, and WHEREAS the arrangements and accommodations have been most effectively planned,

BE IT RESOLVED that this Association extend its heartfelt thanks to:

1. The officials of the city of Columbus, Ohio
2. The officials and personnel of the Ohio State University
3. The management and service personnel of the Deschler Hilton Hotel of Columbus, Ohio
4. The officers, committee chairman, speakers and participants in the program of the convention
5. The convention manager, Charles Kovacic of Ohio State University
6. The convention bureau of the city of Columbus, Ohio
7. The merchants of the city of Columbus, Ohio.

Respectfully submitted,
James W. Long, Chairman

COLLEGE PHYSICAL EDUCATION ASSOCIATION

REPORT OF THE TEACHER EDUCATION COMMITTEE

The chairman contacted all members of the committee immediately following the convention of AAHPER in Chicago. The recommendations of last year's chairman that a meeting of the Teacher Education Committee be held in Chicago at the time of the National Convention did not seem practical since insufficient time was available to determine how many of the committee members planned to attend, and when the convention hotel guest list was checked only four members of the committee could be located. As a result, all the work of the committee has been conducted by correspondence.

Since Program Chairman Daniels asked that all program copy for the Columbus Convention be in his hands by May 15, all members of the Teacher Education Committee were asked to devote their immediate attention to the planning of two section meetings for this convention. Correspondence with the committee resulted in four informative letters which arrived on time to be of use and one which arrived too late for consideration. Three members of the committee did not respond. On the basis of suggestions made by the committee, the attached program was arranged and approved by six members of the committee. Two members of the committee did not acknowledge the letter requesting approval of the program.

During the past year no projects were initiated by the Teacher Education Committee. However, the chairman has cooperated with the Commission on Teacher Education of the American Council on Education in a study involving Teacher Supply and Demand and with the National Council for Accreditation of Teacher Education in agreeing to serve as an alternate delegate for the CPEA on the Workshop Committee which will meet in Washington, D. C. February 18, 19, and 20, 1957. The purpose of the workshop will be to develop supplementary guides and standards in the areas of health education, physical education and recreation. Guides and standards are also to be developed for self-evaluation of professional programs of preparation in these three areas. In addition the CPEA Committee on Teacher Education has expressed a willingness to work with the AAHPER Committee on the Improvement of Professional Preparation in Health Education, Physical Education and Recreation.

During the past year significant correspondence has taken place with the National Society of College Teachers of Education and with the National Commission on Teacher Education and Professional Standards. Dr. Raymond A. Snyder of the University of California has been working very closely with the latter group and is also active in California Council

on Teacher Education. He offered to present a paper on "Newer Perspectives in Professional Preparation" at the Convention but our program had already been established at the time his offer was made. It is suggested that he be considered for membership on this Committee.

Other significant developments as reported by members of this Committee which would have possibilities for further study are:

1. Changing patterns of graduate education
2. Graduate Curricula in recreation
3. Internships vs. traditional student teaching patterns
4. Certification of coaches

Respectfully submitted,

Don Adey, Fort Hays Kansas State College
Jack A. Byrom, Oklahoma A & M College
T. J. Chambers, Howard University
J. W. Fredericks, University of Southern California
R. H. Johnson, University of Illinois
J. W. Kistler, Louisiana State University
J. M. Pease, Utah State Agricultural College
S. B. Suddeth, George Peabody College
K. C. H. Oermann, University of Pittsburgh, Chairman

FUNCTION AND STRUCTURE COMMITTEE

The report of the Function and Structure Committee was given at the general session this morning. By action of the membership the report was approved and is to be referred to the Constitution Committee for implementation.

By the same action the Function and Structure Committee was discharged as a Continuing Committee, having completed its assignment.

Respectfully submitted,

A. S. Daniels, Chairman

REPORT OF THE COMMITTEE ON BASIC RESEARCH

The "Committee on Basic Research" conducted two program meetings at this 60th Annual Convention of the C.P.E.A. The effort this time was to bring together some of the evidence that College Physical Education affects the participants who take it. Evidence was documented and summarized by the following contributors:

1. Joy Kistler represented sub-committee No. 1 and presented his own paper on sportsmanship problems and achievements.
2. Karl Bookwalter presented a comprehensive documented paper on "Motor Fitness Effects of College Physical Education."
3. Clayton Shay's documented paper was read by Michael Yuhasz, dealing with "Effects of Specific Sports Upon Fitness."
4. Thomas K. Cureton presented a condensed summary of his documented paper of 99 references to evidence which gives us a clearer view of "The Nature of Cardiovascular Fitness in Humans."
5. Ernst Jokl summarized the differences between the normal cardiovascular physiology and the "Clinical Pathology of Cardiovascular Condition," emphasizing case histories.
6. Robert E. McAdam presented a paper on Component I, "Effect of Physical Training Upon Peripheral Resistance and the Autonomic Nervous System."
7. Raymond A. Weiss presented a carefully documented paper on Component III, "Effects of Sub-Maximal Exercise on Cardiovascular Condition," summarized by T. K. Cureton.
8. Ernest Michael's carefully documented report on Component V, "Circulatory Recovery from Hard Exercise," was read by B. F. Husman.
9. Thomas K. Cureton's documented paper on "Improvements in Cardiovascular Condition of Humans Associated with Progressive Physical Training and Persistently Performed Sports and Exercises" was briefly summarized.
10. Frank Sills summarized his carefully documented paper on "Effects Upon Physique (and Body Mechanics) of College Physical Education Program." He was assisted in the presentation by Raymond W. Kireilis, T. E. Blesh, and Lawrence Rarick.

I recommend that this report be received and that the papers as edited and adjusted to the size limits be published in the Annual Proceedings, and that a Committee on Basic Research be continued.

Respectfully submitted,

T. K. Cureton, Jr., Chairman

PUBLICITY COMMITTEE REPORT

1. The final working committee resolved to the below-listed members:

D. C. Seaton, Univ. of Kentucky
H. H. Clark, Univ. of Oregon
W. A. Stevens, Univ. of Toronto
H. E. Kenney, Univ. of Illinois
D. C. Bartelma, Univ. of Colorado
Ken D. Miller, Florida State Univ.
L. F. Keller, Univ. of Minnesota
Robert Keefe, Bowling Green Univ.
J. A. Scannel, Notre Dame Univ.
C. W. Morgan, Springfield College
K. C. Runquist, Temple Univ.
R. N. Yard, Denison Univ.

2. The nation was subdivided into regions with each of the above Committee members responsible for the distribution of a standard publicity letter to members in his region. These letters were prepared by the Chairman and printed at Denison University.
3. On October 22, 1956, enclosure (A) was sent to the entire membership.
4. On December 4, 1956, a second letter, enclosure (B), was mailed to all members along with a publicity questionnaire, enclosure (C).
5. A nationwide publicity release was made on December 20, and this was followed up by an individual release enclosure (D), covering the attendance of C.P.E.A. members who replied to the publicity questionnaire. An additional paragraph or two was added to enclosure (D) reporting to the local newspapers indicated on the questionnaire the name of the person attending from that area, plus the college he represented, on what committee of the C.P.E.A. he serves, and the title of the paper he was to present.
6. Local newspapers, radio stations, and TV stations in Columbus carried the national and individual publicity, but would not cooperate with picture coverage unless we supplied the pictures.
7. It is strongly suggested that a small budget (\$50 to \$100) be allocated to future committees to defray the expense of actual convention coverage.

Respectfully submitted,

Rix N. Yard, Chairman

REPORT OF THE JOINT COMMITTEE ON PHYSICAL
EDUCATION AND ATHLETICS
(C.P.E.A.; N.C.A.A.; A.A.H.P.E.R.)

Names and Addresses of the Committee Personel.

- a. Representing the C.P.E.A.
Elmer Mitchell, University of Michigan, Ann Arbor, Michigan
1958
Lyle K. Butler, Oberlin College, Oberlin, Ohio 1957
Louis F. Keller, University of Minnesota, Minneapolis 1956 –
Chairman
- b. Representing the N.C.A.A.
Paul M. Brechler, State University of Iowa, Iowa City 1958
Howard Danford, Florida State University, Tallahassee, Florida
1957
Lester Fraley, University of Maryland, College Park, Maryland
1956
- c. Representing the A.A.H.P.E.R.
Harry A. Scott, Teachers College Columbia University, New York
1959
Marshall Turner, Johns Hopkins University, Baltimore, Mary-
land 1958
Theodore Harder, University of California, Santa Barbara
College, Santa Barbara, California 1957

The Functions of the Committee are:

- a. To study, discuss and make recommendations on problems of
mutual interest in the field of physical education and athletics
for men.
- b. To formulate plans for the composition and distribution of factual
information of national interest pertaining to physical education
and athletics.
- c. To gather information and make studies of trends in physical
education and athletics which are of common interest to the
organizations represented.
- d. To act as an agency for inter-association relationships.

The Activities of the Committee for the year 1956 were as follows:

- a. One meeting of the committee was held in the Conrad Hilton
Hotel, Chicago, Illinois on March 27, 1956 at the time of the
A.A.H.P.E.R. convention. At this meeting the chairman was di-
rected to call a two or three day meeting of the committee to
discuss the possibility of and take steps toward the setting up of
a workshop to study the functions and essential qualifications of
the college Athletic Director.

All attempts to get the committee together for this proposed meeting during the past summer and fall were unsuccessful. However such meeting is to be held on the 29th and 30th of December in Columbus. It is hoped that some positive action relative to the proposed workshop will result.

Some of the problems that would be considered at the workshop are:

1. The position of the Athletic Director and the professional training and other qualifications needed to fulfill best the responsibilities of this position on the college level.
2. The matter of joint appointments which involves the coaching of intercollegiate teams and also the teaching of physical education.
3. The joint use of facilities by intercollegiate, intramural and physical education areas.
4. The matter of uniformity and non-uniformity of academic titles of staff members working in the various areas.

b. Financial Report

On hand March 1955		\$ 70.05
Receipts		
Mar. 14, 1956 - N.C.A.A.	\$25.00	
Nov. 30, 1956 - C.P.E.A.	25.00	
Dec. 12, 1956 - A.A.H.P.E.R.	25.00	75.00
		<u>145.05</u>
Disbursements		
Mar. 27, 1956 Luncheon Meeting Hilton Hotel		25.00
Balance on Hand Dec. 30		<u>\$ 120.05</u>

Respectfully submitted,

Louis F. Keller, Chairman

MINUTES OF MEETING

Columbus, Ohio — December 29, 1956

The following actions were taken:

1. It is recommended that a national working conference be held to consider —

The duties and qualifications of the Athletic Director in Colleges.

The following areas were suggested:

- a. Administration and departmental relationships
 - b. Finance
 - c. Property and equipment
 - d. Public relations
 - e. Personnel
 - f. Duties related to participants
2. The next meeting of the committee will be held in St. Louis, Missouri at the time of the N.C.A.A. meetings January 8,9,10, the time and place to be determined by the chairman. At this meeting the committee will make decisions with regard to a future meeting date to make definite plans for the proposed working conference.
It was noted that the three parent organizations have agreed to finance their respective representatives at such a planning meeting.
 3. Mr. Lyle Butler was elected chairman of the Committee for the coming year.

Respectfully submitted,

Louis F. Keller, Chairman

REPORT OF THE REPRESENTATIVE TO THE
NATIONAL COMMITTEE FOR THE IMPROVEMENT OF PRO-
FESSIONAL PREPARATION IN HEALTH EDUCATION,
PHYSICAL EDUCATION AND RECREATION

Your representative attended the meeting of the committee at the Hotel Conrad Hilton in Chicago on March 25, 1956.

The officers for 1956-57:

Chairman:	Carl. L. Nordly, University of California
Vice-Chairman:	Minnie L. Lynn, University of Pittsburgh
Secretary-Treasurer:	H. Frederick Kilander, New York University
Members-at-large:	William M. Grimshaw, Ithaca College Dorothy B. Nyswander, University of California

1. The Treasurer reported:

Balance on hand February 24, 1955	\$292.47
Receipts	00.00
Disbursements	18.00
Balance on hand March 20, 1956	<u>\$274.47</u>

2. Reports were presented by representatives of the following organizations:

American Association for Health, Physical Education and Recreation — Carl L. Nordly
American School Health Association — H. F. Kilander
Athletic Institute — W. L. Hughes
National Association of Physical Education for College Women — Minnie L. Lynn,
National Recreation Association — W. C. Sutherland,
College Recreation Association — W. M. Grimshaw.

The Minutes of the meeting attached hereto give evidence of the activities of the several organizations in the area of improving teacher competency.

3. The Workshop on Professional Preparation in Recreation held under the auspices of the National Committee as a part of the program of the Chicago Convention, AAHPER on March 24, 1956. Under the chairmanship of Earl Kauffman, Coordinator of the

Recreation Subsection, this group spent the entire day in a study of the problem of accreditation in the field of recreation and the function of the National Council for Accreditation of Teacher Education. The results should be most helpful in carrying on the work of preparing evaluative criteria to be used in visitation and self-evaluation.

4. Workshop to develop supplementary guides and standards to those of the National Council for the Accreditation of Teacher Education has been scheduled for February 18, 19 and 20, 1957 in Washington, D.C. Sponsored by the AAHPER and the Athletic Institute a small committee, under the chairmanship of William L. Hughes, with sub-committees under the chairmanship of H.F. Kilander in health education and Earl Kauffman in recreation, has been charged with the responsibility of developing of guides and standards by the National Committee for the Improvement of Professional Preparation. The chairmen of the above sub-committees are each inviting two other persons to assist with the task. Carl Nordly will serve as chairman of the Steering Committee and your representative has been invited to serve with sub-committee on physical education.

In addition each of the organizations having representation in the National Committee for the Improvement of Professional Preparation has been asked to designate a representative.

5. The next meeting of the Committee will be held in Washington in conjunction with the workshop on February 20, 1957.

Respectfully submitted,

William F. Meredith,
Representative

REPORT OF JOINT COMMITTEE WITH N.A.P.E.C.W.
ON CO-EDUCATION PROBLEMS.

A meeting was held with the NAPECW committee on co-education in Chicago last March at the time of the national convention of the AAHPER. The purpose of the meeting was to discuss our mutual concerns in respect to the development of co-education in college physical education programs. Both of our committees felt that there existed a need at this time for the establishment of standards and policies in this area to serve as guides for colleges considering the development of co-educational programs. It was further felt that our committees might together help develop these policies. Upon further investigation, however, it was learned that a joint committee of the NSGWS and the Men's Athletic Division of the AAHPER is already working on such a publication.

After correspondence with Dr. June V. McCann, University of California, who is serving as editor for this publication which is to be released in June 1957, we decided to hold the work of our joint committee with the NAPECW in abeyance until we have an opportunity to examine this booklet and can determine whether it meets our needs.

Respectfully submitted,

Robert T. Kretchmar,
Chairman. Oberlin College

Other Committee Members:

B. W. Miller, University of California
T. McDonough, Emory University

REPORT OF JOINT IMPLEMENTATION COMMITTEE ON INTRAMURAL SPORTS

A continuing Implementation Committee composed of nine members, three each from the College Physical Education Association, the AAHPER, and the NAPECW was approved by the respective Presidents of these organizations to implement the recommendations of the Washington Conference on Intramural Sports. This committee met on March 28, 1956 at the Conrad Hilton Hotel, Chicago, Illinois. The following representatives were present:

M. M. Mackenzie	AAHPER	Air Force Academy, Denver
Mable Locke	AAHPER	University of Idaho
Dorothy Wirthwein	NAPECW	Ohio State University
Katherine Ley	NAPECW	University of Colorado
Joan Masilionis	NAPECW	State Teachers College Fredonia, New York
Paul Keen	CPEA	University of Oklahoma
Rod Grambeau	CPEA	University of Michigan
Norma M. Leavitt		
Proxy for Spurgeon Cherry		University of Florida
Harris Beeman		
Unable to attend		Michigan State University

The meeting was opened by Mr. Jackson Anderson of the AAHPER Office who indicated that Mr. M. M. Mackenzie had been asked to serve as chairman for the occasion, until such a time as a chairman was elected by the group in attendance.

Mr. Mackenzie introduced committee members present followed by the group dividing into smaller groups for discussion. Following this the group reconvened with the following ideas for implementation:

- a. Present the work and results of the Intramural Conference at all professional meetings, such as:
 1. State and district meetings of the college women teachers of physical education
 2. National workshop of the NAPECW in Wisconsin this June
 3. State association meetings
 4. District professional meetings with each state
- b. Sell the Report of the Conference at all such meetings as are listed above.
- c. Enlist the aid of the AAHPER office to keep the Implementation Committee informed of all professional meetings scheduled

for the coming year, and for this spring and summer, so that appropriate contacts may be made.

- d. At state meetings ask the faculty advisers of intramurals in advance to come with the evaluation form filled out and to be prepared to discuss the items and compare differences; gain ideas as to how to improve points where analysis shows such need. As a follow up, a status study reported to the administration of the institution might be of help.
- e. Initiate a campus-wide study of what exists and what can be done to upgrade the program.
- f. Use the evaluation form in each institution; intramural council or board should participate with the faculty concerned in such evaluations.
- g. Conference Reports should reach the administrators of the institutions. Since cost would be prohibitive probably for AAHPER to do this it was suggested that the intramural director or council buy one or more copies for this purpose.
- h. Articles, such as the one by William F. Meredith that appeared in the Journal after the conference, should appear in other physical education publications, in the AACTE newsletter, in bulletins for institutions for higher education, and in other educational periodicals; select those that might be read by those represented on the chart, page 10 of the report. Copies of the Conference Report should be given to all who are represented on the chart.
- i. Student Union personnel should be contacted locally at each institution, and also at their professional meetings.
- j. The need for helping high schools establish intramural programs was discussed but it was felt by some of the group present that we should aid the High School Adaptation Committee of the Conference through advisory help, but that it was not the work of this committee to focus efforts on the secondary school level. Reports of implementation committee can be sent to that committee, for what they may be worth to them.
- k. The Junior College Association should be contacted so they will be cognizant of the fact that the conference report is applicable to their situations.
- l. Emphasize the need to work together in men's and women's departments and with the Student Union; this coordination should even apply to the various college publications or handbooks that are given to the students. A unified publication might be desirable.
- m. We need to work with accrediting associations. Perhaps appraisal of the Intramural Program could be included in the materials used by teams that go out to accredit.
- n. It might be helpful to work through national fraternity offices to apprise them of the Conference Report and appraisal form and suggest to them ways in which it can be used.

- o. Institutional faculty meetings could include on the agenda ten to fifteen minutes for a report on the Intramural Conference.
- p. A flier advertising the Conference Report should be sent out broadcast by the AAHPER if possible, accompanied by an order blank.
- q. Advertising the availability of the Conference Report should be carried by the Journal every month.
- r. Television programs on intramurals should be planned and used. Films of intramural activities can be used on TV between game halves.
- s. Display cases should be set up which will publicize intramurals. Such displays should be in the physical education building, and also in the stadium and at other likely places on campus.
- t. It would be helpful if AAHPER could prepare art slides (cartoon type) on intramurals which could be sent out from the AAHPER office to people who are willing to talk about the Intramural Conference and feel the need to liven up what might otherwise be a dull oral report.

Election of officers followed with results as follows:

Chairman: Mr. M. M. Mackenzie

Chairman-Elect: Miss Katherine Key

Respectfully submitted,

Rodney J. Grambeau

FINANCIAL STATEMENT

Dec. 1955 — Dec. 1956

Balance: December 1, 1955	Cash	1575.03
	Reserve	<u>1601.21</u>
		3176.24

INCOME:

Membership Dues (473)	2365.00	
Banquet Tickets	416.15	
Proceedings	251.75	
Facilities Book	128.00	
Interest on Reserve	<u>76.35</u>	
	3237.25	<u>3237.25</u>

Total Income and Reserve, Dec. 1, 1956 6413.49

EXPENSES:

Convention: Banquet	439.03	
Name Tags	25.59	
Programs	67.80	
Entertainment		
(Wives)	48.00	
Tickets	4.50	
Stationery and Envelopes	67.20	
Address Plates, Cards	39.89	
Application Blanks	9.60	
Postage, Telephone, Telegraph	15.36	
Bond for Secy.-Treas.	10.00	
Intangible Tax (North Carolina)	1.70	
Refunds	5.05	
Public Relations Committee		
(1955)	9.50	
President's Expense (S.C. Staley)	29.95	
Membership Committee	13.50	
AAHPER (Proceedings		
Expense)	2395.36	
American Council Education	50.00	
Sec'y.-Clerical and Services	<u>300.00</u>	
	3532.03	<u>3532.03</u>

Total Cash and Reserve: Dec. 1, 1956	2881.46
Less Reserve:	<u>1677.56</u>
Cash Balance: Dec. 1, 1956	1203.90

Respectfully submitted,
R. E. Jamerson
Secretary-Treasurer

COLLEGE PHYSICAL EDUCATION ASSOCIATION
EXECUTIVE COUNCIL MEETING
December 27, 1956

Present: E. B. Smith, President; A. S. Daniels, President-Elect; R. E. Jamerson, Secretary-Treasurer; S. C. Staley, Past President; W. F. Meredith, Council Man at Large.

1. Received invitation from A. W. Thompson on behalf of Wayne State University and the City of Detroit to meet in Detroit in 1957.
2. Directed President-Elect to suggest to Membership Committee that they not conduct an intensive membership drive in 1957.
3. Approved payment of \$125.00 honorarium to Dr. Gregory P. Stone.
4. Approved Third General Session on program as a Special Business meeting in accordance with Article VI, Section 2 of the Constitution of the Association.
5. Received reports of Association Representative at meetings of American Council on Education and National Coordinating Committee on Collegiate Problems.
6. Following up Council action of 1954 (Proceedings, Forty-Eighth Annual Meeting, p. 247) the Council voted to hold the 1957 Annual Meetings in the West, at a city to be decided later.

Respectfully submitted,
R. E. Jamerson
Secretary-Treasurer

EXECUTIVE COUNCIL MEETING
December 29, 1956

Present: A. S. Daniels, President; J. H. Shaw, President-Elect; R. E. Jamerson, Secretary-Treasurer; E. B. Smith, Past President.
Absent: C. O. Jackson, Council Man at Large

1. Voted to hold 1957 meetings in Los Angeles, California.
2. Approved appointment of Ray Snyder of UCLA as Chairman of 1957 Convention Committee, the committee to be composed of Ray Snyder, Carl Nordly and John Cooper.
3. Instructed President A. S. Daniels to prepare and send to proper person or persons a statement of the Association's interest in President Eisenhower's Fitness Program, and the desire of the Association for membership on the National Fitness Council.
4. Approved new working agreement with AAHPER for publication of Annual Proceedings.

Respectfully submitted,
R. E. Jamerson
Secretary-Treasurer

COLLEGE PHYSICAL EDUCATION ASSOCIATION
BUSINESS MEETING
December 29, 1956

The sixtieth Annual Meeting of the College Physical Education Association was held in Columbus, Ohio, on December 29, 1956. The meeting was called to order by President E. B. Smith at 3:30 PM in the Hall of Mirrors of the Deshler Hilton Hotel. Approximately one hundred and fifty members were present.

The report of the Secretary-Treasurer was read with the motion that it be approved, second by L. T. Ludwig, passed.

President Smith called for reports of committees as follows (Discussion comments appear here, detailed reports by Committee Chairman appear elsewhere in the Proceedings):

STANDING COMMITTEE REPORTS:

Nominations. P. A. Hunsicker, chairman, presented the following slate of candidates for President-Elect; L. C. Adams, A. A. Esslinger, J. H. Shaw. President Smith asked for nominations from the floor for the office of president-elect; there being none T. E. McDonough moved the nominations closed, second by R. A. Snyder, passed. There being no majority on the first ballot, members were asked to vote for A. A. Esslinger and J. H. Shaw the two candidates receiving the highest number of votes. J. H. Shaw was elected on the second ballot. Council Man at Large: E. C. Davis, C. O. Jackson, J. McCristal. President Smith asked for nominations from the floor for the office of council man at large; there being none G. W. Howard moved the nominations closed, second by L. F. Keller, passed. There being no majority on the first ballot, members were asked to vote for E. C. Davis and C. O. Jackson the two candidates receiving the highest number of votes. C. O. Jackson was elected on the second ballot. Secretary-Treasurer: Following the interpretation of the constitution made by the nominating committee in 1955 (Fifty-Ninth Annual Proceedings, p. 396) only one name — R. E. Jamerson — was presented for this office. W. F. Meredith, parliamentarian, ruled this procedure in violation of Article IV, Section 1 of the constitution. President Smith asked for nomination of two more candidates. C.H. McCloy and E.D. Mitchell were nominated by D.Oberteuffer, second by A. S. Daniels, passed. R. E. Jamerson was elected on first ballot.

Constitution. P.H. Derr, chairman. No report.

Construction and Equipment. J. W. Long, chairman, moved acceptance of report, second by H. A. Shenk, passed.

Curriculum Research. W. W. Staton, chairman. No report.

Finance. L. H. Lux, chairman. No report.

Foreign Relations. E. F. Zeigler, chairman, moved report be received, second by A. Weston, passed.

Historical Records. G. W. Howard, chairman, moved acceptance of report, second by C. H. McCloy, passed.

Intramural Sports. H. R. Ryan, chairman, moved report be received, second by L. C. Adams, passed.

Membership. A. C. Zuaro (report by R. E. Jamerson) chairman, moved acceptance of report, second by S. L. Cooper, passed. New members present asked to stand and be welcomed into the association. Honorary membership voted to T. N. Metcalf.

Necrology. G. W. Nesom (report by L. W. Olds), chairman, reported passing of Leon Kranz and John Sellwood. After reading memorandum of each departed member the membership observed a moment of silence in respect to our departed colleagues.

Problems of College Physical Education. C. A. Bucher, chairman, moved report be received, second by J. W. Masley, passed.

Required Service Program. M. Wakefield, chairman, moved report be received, second by Ray Duncan, passed.

Resolution. G. F. Loebs (report by J. W. Long), chairman, moved acceptance of report, second by L. A. Hess, passed.

Teacher Education. K. H. Oermann, chairman, moved report be received, second by G. C. Moore, passed.

Function and Structure. A. S. Daniels, chairman, moved acceptance of report, second by C. L. Nordly, passed. Previous association action at the General Session approved the report, referred same to Constitution Committee for implementation of necessary constitutional changes, and discharged the committee as a continuing committee. G. W. Howard moved, second by D. Oberteuffer, that the Association express its appreciation to this committee for its fine work over the past two years in behalf of the association, passed.

Operating Codes. L. A. Hess, chairman, moved report be received, second by R. B. Kretchmar, passed.

Policies. H. A. Scott (report by R. E. Jamerson), chairman. No report.

Public Relations. R. J. Francis, chairman. No report.

PRESIDENT'S COMMITTEE REPORTS:

Basic Research. T. K. Cureton, chairman, moved report be received, second by R. E. Stultz, passed.

Convention Publicity. R. N. Yard, chairman, moved report be received, second by B. L. Bennett, passed.

Hospitality and Convention Manager. C. R. Kovacic, chairman. No report. Appreciation expressed to C. R. Kovacic by President Smith for a fine job, well done.

JOINT COMMITTEE REPORTS:

American Council on Education. E. B. Smith. Moved report be received, second by W. F. Meredith, passed.

College Committee on Physical Education and Athletics. L. F. Keller. Moved report be received, second by L. K. Butler, passed.

National Committee for Improvement of Professional Preparation in Health Education, Physical Education and Recreation. W. F. Meredith. Moved report be received, second by C. H. McCloy, passed.

Representative Assembly of the AAHPER. R. E. Jamerson. No report.

Joint Implementation Committee on Intramural Sports. R. J. Crambeau. No report.

Joint Committee with NAPECW on Co-Education Problems. R. B. Kretchmar. Moved acceptance of report, second by R. E. Jamerson, passed.

Implementation Committee on College Physical Education Conference. H. W. Schnell (report by J. H. Shaw). No report.

New Business:

Brief discussion of possible meeting sites for 1957 meeting indicated preference for West Coast.

W. F. Meredith expressed concern over recent attacks on the service program. Following general discussion T. E. McDonough moved, second by W. F. Meredith, that the association prepare a statement on physical education to be sent to college presidents, department heads and/or members of the association. D. Oberteuffer offered a substitute motion that the problem be referred to the executive council for study and action. The substitute motion was seconded by S. C. Staley and passed. Thereupon the original motion as now worded in the substitute motion was passed.

On motion by D. Oberteuffer, second by E. D. Mitchell, the members gave outgoing President Smith a standing ovation in recognition of the fine work he and his fellow officers did during 1956 on behalf of the association.

There being no further business the 1956 meeting adjourned at 5:00 PM.

ROLL OF MEMBERS — 1957

(Corrected to March 15, 1957)

*Attended 1956 Convention (1) Past-President (2) Honorary (3) Past Secretary-Treasurer.

ALABAMA

Baughman, W. J., PhD.	University of Alabama (1948)
Clipson, W. F., EdD.	State Teachers College (Troy) (1956)
Flowers, H. A., M. A.	State Teachers College (Florence) (1948)
Salls, D. J., M. A.	State Teachers College (Jacksonville) (1948)
Sharman, J. E., M.A.	Howard College (1955)

ARIZONA

Lavik, R. H., M.A.	Arizona State College (1951)
Thomson, R. G., EdD.	Arizona State College (1954)

ARKANSAS

Hendricks, Troy, EdD.	University of Arkansas (1949)
*Moore, G. C., PhD.	University of Arkansas (1954)
Morrow, A. H., M.A.	Philander Smith College (1954)

CALIFORNIA

Benton, C. W., M. S.	University of Southern California (1957)
Boring, W. J., EdD.	Long Beach State College (1954)
Cooper, J. M., EdD.	University of Southern California (1954)
Crawford, W. H., EdD.	University of California (Riverside) (1947)
Davis, E. C., PhD.	University of Southern California (1932) (1)
Flanagan, L., M. A.	University of California (1956)
Fredericks, J. W., EdD.	University of Southern California (1934)
Gallon, A. J., M. A.	University of California (1956)
Governali, Paul, EdD.	San Diego State College (1955)
Harder, Theodore, M. A.	University of California (Santa Barbara) (1949)

CALIFORNIA (Continued)

- Harkness, W. W., M. A. San Francisco State College (1949)
 Hewitt, J. E., EdD. University of California (Riverside) (1953)
 Hollingsworth, C. B., M. A. University of California, LA (1948)
 Jumonville, F. J., EdD. Los Angeles State College (1954)
 McCormick, H. J., EdD. Sacramento State College (1941)
 Metcalf, T. N., M. A. 1208 San Miguel, Santa Barbara (1916) (1)
 (2) (3)
 Miller, B. W., PhD. University of California, LA (1943)
 Miller, H. G., M. A. University of Southern California (1954)
 Nixon, J. E., EdD. Stanford University (1949)
 *Nordly, C. L., PhD. University of California (1935) (1)
 Palmer, C. L., EdD. University of Southern California (1952)
 Pape, L. A., EdD. Fresno State College (1949)
 Richardson, E. D., EdD. University of California, LA (1953)
 Rowen, Victor, EdD. San Francisco State College (1953)
 Ruys, Jozef, PhD. University of California (1956)
 *Snyder, R. A., EdD. University of California, LA (1946)
 Terry, W. L., M. S. San Diego State College (1948)
 Thomas, P. S., M. S. 1137 West 37 Place, Los Angeles (1955)
 Toomey, E. F., B. S. University of California (1935)
 Trieb, C. F., PhD. Occidental College (1949)
 Vandemburgh, W. G., EdD. Fresno State College (1952)
 Williams, J. F., M.D. Carmel, California (1919) (1) (2)
 Young, C. H., EdD. University of California, LA (1948)
 Young, L. F., M. A. University of Southern California (1957)

COLORADO

- Bartelma, D. C., EdD. University of Colorado (1948)
 Cillo, Lt. W. C., B. S. U. S. Air Force Academy (1955)
 Clapp, R. G., M.D. 1200 S. College Avenue, Ft. Collins (1906)
 (2)
 DeArmond, Capt. M. E., B.S. U. S. Air Force Academy (1956)
 Doubenmier, J. S., M. A. Colorado State College of Education (1949)
 *Lobdell, Capt. Harison, B.S. U. S. Air Force Academy (1955)
 *MacKenzie, M. M., EdD. U. S. Air Force Academy (1952)
 McGlothlin, Maj. W.C., B.S. U. S. Air Force Academy (1955)
 Vavra, C. G., B. A. University of Colorado (1954)

CONNECTICUT

- *Blesh, T. E., PhD. Yale University (1951)
 Fait, Hollis, PhD. University of Connecticut (1953)
 Field, D. A., EdD. Bridgeport University (1951)

CONNECTICUT (Continued)

*Kennedy, R. E., M.Ed.	University of Connecticut (1956)
Kiphuth, R. J. H., B. S.	Yale University (1931)
*Martin, J. F., B. A.	Wesleyan University (1924)
McCurdy, H.G., M. A.	Wesleyan University (1925)
Merriman, J. S., BPE.	U.S. Coast Guard Academy (1956)
Oosting, Ray, M.Ed.	Trinity College (1927)
Van Bibber, E. G., EdD.	University of Connecticut (1938)

DISTRICT OF COLUMBIA (Washington)

Anderson, G. F., EdD.	AAHPER, 1201 Sixteenth St. N. W. (1953)
*Anderson, J. M., PhD.	AAHPER, 1201 Sixteenth St. N. W. (1948)
*Barnes, S. E., M. A.	Howard University (1951)
*Chambers, J. T., M.Ed.	Howard University (1952)
Krupa, J. H., EdD.	George Washington University (1955)
Troester, C. A., Jr., EdD.	AAHPER, 1201 Sixteenth St. N. W. (1941)
Tyrance, H. J., PhD.	Howard University (1948)

FLORIDA

Adams, M. K., M. A.	University of Tampa (1955)
*Cherry, H. S., M. A.	University of Florida (1951)
Damron, C. F., Dir. PE.	University of Florida (1955)
*Danford, H. G., EdD.	Florida State University (1947)
Haskin, Jack, Dir. Rec.	Florida State University (1955)
Kelsey, J. M., M. A.	Miami University (1955)
Leaver, D. L., M. A.	Bethune-Cookman College (1955)
Mason, J. G., EdD.	Miami University (1948)
McCachren, J.R., M. A.	University of Florida (1955)
Miller, K. D., EdD.	Florida State University (1949)
Moreland, R. B., M.Ed.	J. B. Stetson University (1955)
Philpott, F. E., M. A.	University of Florida (1955)
Price, Hartley, PhD.	Florida State University (1947)
Schnell, H. W., M. A.	University of Florida (1951)
*Scott, T. M., M.Ed.	University of Florida (1956)
Stanley, D. K., M.Ed.	University of Florida (1937)
Stevens, B. K., M. A.	University of Florida (1955)
*Veller, Don, Dir. PE.	Florida State University (1956)
Waglow, I. F., M.Ed.	University of Florida (1955)

GEORGIA

Cooper, G. F., Jr., M. A.	Emory University (1950)
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GEORGIA (Continued)

- *McDonough, T. E., M. A. Emory University (1937) (1)
 *Partin, W. C., M.Ed. Emory University (1956)
 *Smith, E. B., M. A. University of Georgia (1947) (1)

ILLINOIS

- Bank, T. P., M. A. The Athletic Institute, Chicago (1949)
 Berrafato, P. R., B. S. University of Illinois, Navy Pier, Chicago (1948)
 Beyer, E. F., M. S. George Williams College (1949)
 *Boycheff, Kooman, PhD. University of Chicago (1949)
 Boydston, Donald, EdD. Southern Illinois University (1951)
 Brissman, L. C., M.Ed. Augustanna College (1950)
 Chrouser, H. C., M. A. Wheaton College (1954)
 *Cureton, T. K., PhD. University of Illinois (1929)
 *Erickson, C. E., EdD. Southern Illinois University (1954)
 Fenstemacher, W. R., M. A. George Williams College (1949)
 Florio, A. D., EdD. University of Illinois (1948)
 *Fordham, S. L., B. S. University of Illinois, Navy Pier, Chicago (1948)
 Gedvilas, L. L., B. S. University of Illinois (1948)
 Hein, F. V., PhD. American Medical Assoc., Chicago (1948)
 Heusner, W. W., PhD. Southern Illinois University (1955)
 Hill, E. L., M. A. Illinois State Normal University (1950)
 Hubbard, A. W., PhD. University of Illinois (1954)
 Jackson, C. O., EdD. University of Illinois (1948)
 Johnson, R. H., EdD. University of Illinois (1948)
 Jones, J. O., M. S. University of Illinois, Navy Pier, Chicago (1947)
 *Kenney, H. E., M. S. University of Illinois (1950)
 Knapp, C. G., PhD. University of Illinois (1954)
 Kristufek, C. J., B. S. University of Illinois, Navy Pier, Chicago (1951)
 LeBaw, N. L., M. S. Northern Illinois State Teachers College (1954)
 *LeFevre, J. R., EdD. Southern Illinois University (1956)
 Lundeen, V. C., M.Ed. Augustana College (1950)
 Martin, G. A., M. A. Southern Illinois University (1955)
 *Masley, J. W., EdD. Eastern Illinois State College (1947)
 *McAdam, R. E., PhD. Northern Illinois State College (1956)
 Meade, W. T., M. A. Southern Illinois University (1956)
 *Merrick, R. D., EdD. Southern Illinois University (1953)
 *Miller, L. H., B. S. University of Illinois, Navy Pier, Chicago (1948)
 Moyle, W. F., B. S. University of Chicago (1954)

ILLINOIS (Continued)

Pohndorf, R. N., M.PE.	University of Illinois (1955)
*Reuter, E. R., M. A.	University of Illinois (1951)
*Shea, E. J., PhD.	Southern Illinois University (1947)
Stafford, G. T., EdD.	University of Illinois (1939)
*Staley, S. C., PhD.	University of Illinois (1926) (1)
*Steinberg, S. S., EdD.	Southern Illinois University (1956)
Steinhaus, A. H., PhD.	George Williams College (1930)
*Trevor, D. S., M. S.	Knox College (1954)
*Warner, A. P., PhD.	DePaul University (1954)

INDIANA

*Annarino, A. A., M.PE.	Purdue University (1956)
Bauer, E. G., M. A.	Valparaiso University (1956)
*Bookwalter, K. W., EdD.	Indiana University (1938)
*Cousins, G. F., Dir. PE.	Indiana University (1955)
*Cowell, C. C., PhD.	Purdue University (1947)
*Daugherty, J. B., PhD.	Indiana University (1952)
Erdmann, C.P., M. A.	DePauw University (1949)
Fallon, T. W., M. A.	Notre Dame University (1948)
Frazier, Garland, M.Ed.	Wabash College (1956)
Gingerich, R. L., M. A.	Goshen College (1950)
*Haniford, G. W., Jr., M.PE.	Purdue University (1955)
Harvey, R. R., M. A.	DePauw University (1954)
*Korrsgaard, Robert, EdD.	Ball State Teachers College (1953)
Loveless, J. C., M. A.	DePauw University (1951)
*McCall, R. A., PhD.	Ball State Teachers College (1954)
Macholtz, J. D., M. A.	Anderson College (1956)
Marks, W. E., EdD.	Indiana State Teachers College (1956)
Napolitano, D., J., M. A.	Notre Dame University (1948)
Patty, W. W., PhD.	Indiana University (1949)
Rangalas, E. P., Dir. PE.	Anderson College (1957)
Scannel, J. A., EdD.	Notre Dame University (1938)
Slater-Hammel, A. T., PhD.	Indiana University (1956)
*Struck, R. F., M. S.	Hanover College (1949)
*Wakefield, M. C., EdD.	Indiana University (1948)
Yoder, J. H., B. A.	Goshen College (1956)

IOWA

*Alley, L. E., PhD.	University of Iowa (1954)
Carter, R. A., B.Ed.	Graceland College (1954)
Heilman, C. L., EdD.	Drake University (1949)
Martropaolo, Joseph, B.S.	University of Iowa (1954)
*McCloy, C. H., PhD.	University of Iowa (1929) (2)

IOWA (Continued)

Peterson, C. T., M. S.	University of Dubuque (1938)
Schramm, Al., M. A.	Loras College (1949)
*Sills, F. D., PhD.	University of Iowa (1953)
Truesdale, J. C., M.A.	Grinnell College (1949)

KANSAS

Adee, Don, PhD.	Ft. Hays Kansas State College (1947)
Elbel, E. R., PhD.	University of Kansas (1956)
Evans, T. M., M. S.	Kansas State College (1951)
Green, E. E., B. S.	Kansas State College (1956)
Henry, D. W., M. A.	University of Kansas (1954)
McCullough, E. D., PhD.	Kansas State Teachers College (1956)
Nowak, T. S., Dir. PE.	St. Benedicts College (1956)
*Pease, J. M., EdD.	Kansas State Teachers College (1953)
*Schnitzer, W. J., EdD.	Kansas State Teachers College (1954)
*Shenk, H. A., EdD.	University of Kansas (1947)
Wauthier, R. A., M. S.	Kansas State College (1956)
*Welch, F. G., M. S.	Kansas State Teachers College (1956)

KENTUCKY

*Clay, M. A., EdD.	University of Kentucky (1956)
Hackensmith, C. W., PhD.	University of Kentucky (1938)
*Heldman, John, Jr., M. A.	University of Louisville (1948)
*Johnson, B. M., B. A.	University of Kentucky (1956)
*Jokl, Ernst, M. D.	University of Kentucky (1956)
*Karsner, M. G., PhD.	University of Kentucky (1956)
*McCubbin, W. E., M. A.	University of Kentucky (1955)
*Mendelsohn, E. J., M. A.	University of Louisville (1956)
*Reece, A. M., Jr., M. A.	University of Kentucky (1949)
*Schwarberg, W. D., EdD.	University of Cincinnati (1956)
*Seaton, D. C., EdD.	University of Kentucky (1948)

LOUISIANA

Capen, E. K., PhD.	Northwestern State College (1956)
Harper, D. S., M. S.	Southeastern Louisiana College (1950)
*Kistler, J. W., PhD.	Louisiana State University (1945)
Nesom, G. W., M. S.	Northwestern State College (1947)
Walden, H. E., M. S.	Louisiana College (1948)

MAINE

Costello, R. A., M. S.	Gorham State Teachers College (1956)
Loebs, G. F., M. A.	Colby College (1934)
Lux, L. H., EdD.	Bates College (1947)
Meylan, G. L., M. D.	Casco, Maine (1903) (1) (2)
Sabasteanski, F. F., M.Ed.	Bowdoin College (1953)
Wallace, S. M., B. S.	University of Maine (1931)

MARYLAND

Cochran, C. R. P., M. A.	Johns Hopkins University (1954)
*Eyler, M. H., PhD.	University of Maryland (1956)
Fraley, L. M., PhD.	University of Maryland (1950)
Humphreys, J. A., EdD.	University of Maryland (1952)
*Husman, B. F., EdD.	University of Maryland (1955)
Johnson, W. R., EdD.	University of Maryland (1952)
*Massey, B. H., M. S.	University of Maryland (1950)
Minnigan, Don, EdD.	Towson Teachers College (1949)
Turner, M. S., Jr., B.A.	Johns Hopkins University (1947)

MASSACHUSETTS

Afflect, G. B.	Springfield College (1948) (2)
Bullock, J. E., M. A.	Williams College (1935)
Campney, H. K., M. S.	Amherst College (1955)
Carpenter, P. R., B. A.	Worcester Polytechnic Institute (1912) (2)
Chaffee, C. C., M. A.	Williams College (1938)
Delahanty, R. J., B.PE.	Camp Monomy, East Brewster (1927) (2)
Dunbar, H. F., Jr., EdD.	Amherst College (1949)
Ellis, F. M., M.Ed.	Tufts University (1956)
Friedman, Benny, B. A.	Brandeis University (1956)
Gallagher, H. W., B. S.	Northeastern University (1953)
Granger, R. Z., M. A.	Clark University (1956)
Harmon, J. M., EdD.	Boston University (1933)
Havel, R. C., EdD.	Springfield College (1951)
Heller, I. J., M. A.	Brandeis University (1955)
*Lumley, A. E., M. A.	Amherst College (1947)
*Marsh, A. W., M.Ed.	Amherst College (1921) (1)
Palmer, L. R., M.Ed.	Tufts University (1948)
Rostas, S. M., M.Ed.	Amherst College (1947)
Seymour, E. W., EdD.	Springfield College (1949)
Shay, C. T., EdD.	Springfield College (1949)
Shea, E. J., B. A.	University of Massachusetts (1953)
Sparks, R. E., M. A.	Springfield College (1949)
Yeager, W. S., B. PE.	Tufts University (1927) (2)

MICHIGAN

- *Antonacci, R. J., EdD. Wayne State University (1949)
- *Beeman, N. F., M. A. Michigan State University (1949)
- *Bennett, Norman, M. A. Ferris Institute (1956)
- Bovard, A. J., B. A. Michigan College of Mining and Tech. (1956)
- *Dales, G. G., M. A. Western Michigan College (1956)
- Ertell, N. H., M. A. Wayne State University (1955)
- *Finch, R. W., M. A. Central Michigan College (1947)
- Friedrich, J. A., PhD. Michigan State University (1956)
- *Grambeau, R. J., M. A. University of Michigan (1953)
- *Herrold, A. C., M. A. Central Michigan College (1956)
- *Hunsicker, P. A., PhD. University of Michigan (1953)
- *Kirchner, R. J., M. S. Central Michigan College (1956)
- Karas, Frank, M. A. Ferris Institute (1953)
- *Lande, Leon, M. S. University of Michigan (1956)
- *Lash, H. A., M. S. Kalamazoo College (1949)
- *Leibee, H. C., M. S. University of Michigan (1949)
- McCristal, K. J., EdD. Michigan State University (1949)
- *Mitchell, E. D., PhD. University of Michigan (1930) (1)
- Montoye, J. J., M. S. Michigan State University (1949)
- Myers, F. H., M.Ed. Central Michigan College (1956)
- *Olds, L. W., D. PH. Michigan Normal (1951)
- Riskey, E. N., M. S. University of Michigan (1955)
- *Ruffer, W. A., M. A. Michigan Tech., Sault Ste. Branch (1956)
- *Smith, J. W., B. A. Michigan State University (1956)
- Sprankle, D. R., M. A. Albion College (1956)
- Staton, W. M., EdD. Wayne State University (1951)
- Steen, Barney, M. A. Calvin College (1953)
- Theunissen, W. V., Dir. PE. Central Michigan College (1956)
- *Thomas, A. S., Dir. PE. Central Michigan College (1956)
- Webster, R. W., PhD. Michigan State University (1941)
- Young, R. N., B. S. Michigan State University (1923) (2)
- *Zeigler, E. F., PhD. University of Michigan (1950)
- *Zenti, R. N., EdD. Wayne State University (1956)

MINNESOTA

- Anderson, E. W., M.Ed. Augsburg College (1956)
- Christenson, I. A., M.Ed. Concordia College (1947)
- *Donnelley, R. J., PhD. University of Minnesota (1953)
- *Keller, L. F., PhD. University of Minnesota (1922) (1)
- Fritz, H. G., M. A. Bemidji State College (1950)
- Moore, R. B., PhD. Mankato State Teachers College (1956)
- µMueller, C. E., M. A. University of Minnesota (1954)

MINNESOTA (Continued)

Osell, C. R., M. A.	University of Minnesota (1947)
Ostrander, M. E., M.Ed.	University of Minnesota (1947)
Piper, R. A., EdD.	University of Minnesota (1947)
Rickert, L. J., EdD.	University of Minnesota (Duluth Br.) (1957)
*Wells, W. M., M.Ed.	University of Minnesota (1948)

MISSISSIPPI

McMurray, J. G., PhD.	University of Mississippi (1947)
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MISSOURI

Burrus, H. C., Jr., EdD.	Washington University (1948)
Eberhardt, W. C., M. A.	St. Louis University (1956)
Harper, L. R., EdD.	Central Missouri State College (1957)
Hindman, D. A., PhD.	University of Missouri (1938)
Keller, J. O., M. A.	University of Missouri (1949)
*Patterson, N. A., M. A.	William Jewell College (1956)
*Peterson, H. D., Dir. PE.	Northwest Missouri State (1953)
Stankowski, A. J., M. A.	University of Missouri (1941)
*Williams, R. H., M. A.	Park College (1951)

NEBRASKA

Addison, R. A., M. A.	Doane College (1953)
Geir, J. G., M. A.	University of Nebraska (1953)
Good, H. C., M. S.	University of Nebraska (1956)
Gross, E. C., M. S.	University of Nebraska (1956)
*Higginbotham, Ed., M. A.	University of Nebraska (1953)
Miller, C., M. A.	University of Nebraska (1949)
Wear, C. C., PhD.	University of Nebraska (1953)

NEW HAMPSHIRE

*Evans, H. M., B.PE.	Dartmouth College (1941)
Locke, E. A., M. D.	Wilton, N. H. (1937) (2)

NEW JERSEY

Conroy, J. J., EdD.	Princeton University (1949)
*Hausser, P. C., M. A.	Newark College of Engineering (1956)

NEW JERSEY (Continued)

Little, George, B. A.	Rutgers University (1921) (1) (2)
Metz, R. V., M. A.	Fairleigh-Dickson College (1955)
Misar, F. J., M. A.	Stevens Institute of Technology (1948)
Reed, J. J., M. A.	Princeton University (1950)
Rockafeller, H. J.; B. S.	Rutgers University (1932)
*Simon, J. M., M. A.	Newark College of Engineering (1956)
Tauber, A. D., M. A.	Yeshiva University (1955)
Twitchell, A. W., M.Ed.	Rutgers University (1953)
Zweidinger, W. E., M.A.	New Jersey State Teachers College (1951)

NEW MEXICO

Dickson, J. F., PhD.	Eastern New Mexico University (1956)
Langston, D. F., Dir. PE.	Eastern New Mexico University (1956)
Settle, Caskey, EdD.	New Mexico Highlands University (1934)

NEW YORK

Abraham, J. N., M. S.	Hobart College (1955)
*Adams, L. C., EdD.	Columbia University (1937) (3)
Alexander, L. A., M. A.	University of Rochester (1931)
Alitz, L. A., B. A.	U. S. Military Academy (1955)
Allen, R. L., Dir. PE.	State University Teachers College, Cortland (1955)
*Baley, J. A., PhD.	State University Teachers College, Cortland (1955)
Balquist, J. W., M. A.	Columbia University (1947)
Begelman, J. D., PhD.	Hunter College (1951)
Begenau, Don, M. A.	Queens College (1956)
Brownell, C. L., PhD.	Teachers College, Columbia (1920)
Bruce, R. M., M.Ed.	U. S. Military Academy (1949)
*Bucher, Charles, Ed.D.	New York University (1954)
Campbell, D. A., M. S.	State University of New York, Oswego (1955)
Campbell, L. D., EdD.	State University Teachers College, New Platz (1954)
Campbell, W., M.Ed.	University of Rochester (1927) (2)
*Corkery, J. J., B. S.	Rensselaer Polytechnic Institute (1956)
Davey, J. L., M.Ed.	C. W. Post College (1956)
*Davis, W. D., M. A.	Queens College (1956)
DeKoff, Irwing, M. A.	Columbia University (1955)
Doscher, Nathan, PhD.	Brooklyn College (1956)
Economos, J. J., M.Ed.	Brooklyn College (1948)
Elkow, J. D., PhD.	Brooklyn College (1956)

NEW YORK (Continued)

- Elliott, E. S., M.D.
 *Fall, C. R., EdD.
 Farina, A. M., EdD.
 Feld, A. A., Prof. Dip.
 Fleishcher, M. M., M. A.
 *Foglia, G. F., M. A.
 Graham, Paul, M. A.
 Gray, John, M. A.
 Grover, G. H., EdD.
 Hansen, Canute, D.D.S.
 *Howard, G. W., PhD.
 Howit, Roy, EdD.
 *Johnson, T. E., EdD.
 Kirpatrick, T. B., M. A.
 Kress, J. B., M. A.
 *Kroeten, H. J., M.Ed.
 Larsen, L. A., PhD.
 *Lawrence, D. J., M. A.
 Madden, J. E., EdD.
 McClane, J. A., M. A.
 *McEvoy, L. T., M. A.
 McNamee, J. J., Jr., M.A.
 Mendelis, J. J., EdD.
 Meinhold, A. H., M.Ed.
 Moffett, D. C., PhD.
 Oleson, F. A., PhD.
 Palone, J. M., B. S.
 Peelle, J. E., M.PE.
 Picariello, S. P., M. A.
 Polansky, D. L., M. A.
 Prettyman, A. I., B.PE.
 Rathbone, F. S., EdD.
 Reilly, C. H., M. A.
 *Rogers, M. H., EdD.
 Rohan, J. P., M. A.
 *Runkle, R. J., EdD.
 *Salmons, Robert, EdD.
 Santora, J. D., M. A..
 *Scott, C. D., M. A.
 *Scott, H. A., PhD.
 Sebastian, C. I., B. S.
 See, D. A., M.Ed.
 *Shaw, J. H., EdD.
 Columbia University (1931) (2)
 University of Buffalo (1948)
 Brooklyn College (1956)
 Queens College (1955)
 Hunter College (1953)
 Queens College (1954)
 Rensselaer Polytechnic Institute (1955)
 Long Island University (1955)
 State Department of Education, Albany
 (1955)
 147-41 - 38th St., New York City (1925) (2)
 Queens College (1930) (1) (3)
 C. W. Post College (1956)
 University of Buffalo (1956)
 Columbia University (1931) (2)
 U. S. Military Academy (1955)
 U. S. Military Academy (1952)
 New York University (1943)
 Colgate University (1953)
 Brooklyn College (1948)
 Alfred University (1956)
 Columbia University (1956)
 St. Bonaventure College (1949)
 City College of New York (1955)
 Polytechnic Institute, Brooklyn (1955)
 Cortland State Teachers College (1930)
 Mil. Leave
 Brooklyn College (1936)
 U. S. Military Academy (1955)
 University of Buffalo (1955)
 Long Island University (1955)
 City College of New York (1953)
 Sampson College (1917) (2)
 Brooklyn College (1956)
 Brooklyn College (1956)
 Brockport State Teachers College (1945)
 Columbia University (1957)
 Teachers College, Columbia (1956)
 Queens College (1954)
 Hunter College (1953)
 Columbia University (1955)
 Teachers College, Columbia (1922) (1) (3)
 Hunter College (1955)
 State University of New York, Oswego
 (1949)
 Syracuse University (1940)

NEW YORK (Continued)

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|-------------------------|------------------------------------|
| Sich, J. S., M. A. | Manhattan College (1953) |
| *Smith, J. A., M. A. | Hofstee College (1952) |
| Smith, Joseph, LL.B. | Brooklyn College (1956) |
| Spitz, G. B., Jr., EdD. | Queens College (1947) |
| *Stultz, R. E., EdD. | Syracuse University (1946) |
| *Tierney, R. J., M. A. | Queens College (1949) |
| Variello, S. F., M. A. | New York University (1955) |
| *Vaughan, A. T., B. S. | Columbia University (1956) |
| Walke, N. S., PhD. | Brooklyn College (1938) |
| Watt, T., Jr., B. S. | Long Island A & T Institute (1948) |
| Weber, M. A., M. A. | Hamilton College (1929) |
| Werner, A. C., M. A. | U. S. Military Academy (1948) |
| Young, C. V. P., M. A. | Cornell University (1904) (1) (2) |
| Zuaro, A. C., M. A. | New York University (1955) |

NORTH CAROLINA

- | | |
|--------------------------|---|
| Allen, E. M., Jr., M. A. | University of North Carolina (1947) |
| Barrow, H. M., EdD. | Wake Forest College (1949) |
| Cornwell, O. K., EdD. | University of North Carolina (1931) (1) |
| Derr, P. H., M. A. | North Carolina State College (1946) |
| Fetzer, R. A., M. A. | University of North Carolina (1924) (2) |
| Hopson, R. W., PhD. | North Carolina College (1952) |
| *Jamerson, R. E., EdD. | University of North Carolina (1935) |
| *Long, J. W., PhD. | Wake Forest College (1947) |
| Miller, J. O., PhD. | East Carolina College (1955) |
| Rabb, W. W., M. A. | University of North Carolina (1949) |
| Scott, Tom, EdD. | Davidson College (1954) |
| Shepard, G. E., EdD. | University of North Carolina (1938) |
| Siewert, F. T., M. A. | Western Carolina College (1950) |
| Townes, T. E., EdD. | North Carolina College (1950) |

NORTH DAKOTA

- | | |
|---------------------|-----------------------------------|
| Marti, L. R., M.Ed. | University of North Dakota (1947) |
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OHIO

- | | |
|-------------------------|------------------------------|
| *Ashbrook, W. P., PhD. | Ohio State University (1929) |
| Ballenger, F., M. A. | Kent State University (1949) |
| *Bennett, B. L., PhD. | Ohio State University (1948) |
| *Bernlohr, W. F., M. A. | Capital University (1956) |
| *Bibler, R. E., M. A. | Oberlin College (1949) |

OHIO (Continued)

- *Butler, L. K., PhD. Oberlin College (1930)
- *Clark, R. L. A., M. A. Oberlin College (1950)
- *Cooper, S. M., EdD. Bowling Green State University (1952)
- *Daniels, A. S., EdD. Ohio State University (1941)
- *Durand, E. S., M. A. Youngstown University (1956)
- *Ersing, W. F., M. A. Ohio State University (1956)
- *Fischer, J. A., Jr., M. A. Kent State University (1951)
- *Fraleigh, W. P., PhD. Ohio State University (1955)
- Gauthier, G. E., B. S. Ohio Wesleyan University (1924) (2)
- Gordon, J. A., M. A. Miami University (1951)
- *Gordon, R. D., M. A. Ohio Wesleyan University (1954)
- Greene, N. N., M.Ed. Central State College (1948)
- *Gregg, W. H., M. A. Miami University (1948)
- Grice, J. W., M. A. Oberlin College (1955)
- *Hendrix, J. W., EdD. Ohio State University (1954)
- *Hess, L. A., EdD. Ohio State University (1950)
- *Hixon, C. A., M. A. Ohio State University (1952)
- *Hoover, W. R., B. S. Kent State University (1947)
- Houdeshell, J. D., B. S. Findlay College (1956)
- *Keefe, R. J., EdD. Bowling Green State University (1952)
- *Kinsey, D. C., PhD. Oberlin College (1947)
- *Kleinman, Seymour, M.A. Ohio State University (1956)
- Knuttgen, H. C., M. S. Ohio State University (1953)
- Kotis, R. J., M.Ed. Kent State University (1955)
- *Kovacic, C. R., M. A. Ohio State University (1948)
- *Koval, Mike, M. A. Hiram College (1956)
- *Kretchmar, R. T., EdD. Oberlin College (1947)
- *Landis, P. E., M. S. State Department of Education, Columbus (1942)
- *Laughter, R. J., M. A. Ohio State University (1956)
- Leech, R. P., B. A. Ohio Wesleyan University (1955)
- Livingston, W. J., B. S. Denison University (1921) (1) (2)
- *Maurer, H. E., PhD. Wittenberg College (1956)
- *Mileham, M. C., M. A. University of Cincinnati (1938)
- *Moore, V. M., M. A. Kent State University (1949)
- *Morrison, W. R., ScD. Oberlin College (1918) (2)
- *Nessley, C. T., M.Ed. Ohio University (1950)
- *Nichols, J. H., M. D. Oberlin College (1916) (1) (2)
- *Oberteuffer, D., PhD. Ohio State University (1935) (1)
- *Rafeld, J. W., M. A. Mt. Union College (1955)
- *Resick, M. C., M. A. Kent State University (1955)
- *Rhoads, A. H., M. A. Ohio University (1951)
- *Rider, G. L., B. A. Miami University (1920)
- Savage, C. W., M. A. Oberlin College (1909) (1) (2) (3)
- Schwarberg, W. D., EdD. University of Cincinnati (1956)
- *Standifer, J. W., EdD. Dayton University (1954)

OHIO (Continued)

*Stevenson, C., B. S.	Oberlin College (1954)
*Strimer, R. M., M.S.	Ohio Wesleyan University (1955)
*Trepp, J. P., M. A.	Ohio University (1956)
*Widdoes, C. C., B. A.	Ohio University (1956)
*Yard, R. N., M. S.	Denison University (1955)
*White, R. E., M.Ed.	Ohio State University (1956)

OKLAHOMA

*Byrom, J. A., EdD.	Oklahoma A & M College (1954)
Harrison, A. B., B. S.	Oklahoma A & M College (1953)
*Keen, P. V., M. S.	University of Oklahoma (1950)
Kevin, J. J., M. A.	Oklahoma A & M College (1941)
Lander, Robert, Jr., EdD.	Northeastern State College (1956)
Metheny, L. A., M. S.	Oklahoma City University (1955)
Record, J. N., M. A.	Phillips University (1955)

OREGON

Borchardt, J. W., B.S.	University of Oregon (1954)
Brumbach, W. B., M. S.	University of Oregon (1953)
Clarke, H. H., EdD.	University of Oregon (1932)
Esslinger, A. A., PhD.	University of Oregon (1947)
Koski, W. A., M. S.	Oregon State College (1953)
Langton, C. V. N., EdD.	Oregon State College (1939)
Peterson, Alexander, EdD.	Southern Oregon College (1956)
Raabe, H. W., M. S.	Oregon State College (1949)
Sparks, L. J., M. A.	Willamette University (1950)
Sprague, Vernon, M. A.	University of Oregon (1952)

PENNSYLVANIA

Barr, J. S., M. A.	Franklin and Marshall College (1954)
Bilheimer, C. E., M. A.	Gettysburg College (1929) (2)
Blum, S. J., M.Ed.	Bucknell University (1947)
*Conger, R. M., M. A.	Penn State University (1956)
Corbin, H. D., PhD.	State Teachers College, Lockhaven (1948)
*Foff, S. P., M.Ed.	Penn State University (1953)
Gardner, R. N., M.Ed.	Lincoln University (1948)
Glascott, J. A., M. S.	University of Pennsylvania (1952)
Gray, A. R., B. S.	Penn State University (1954)
Gross, E. A., M. S.	Penn State University (1950)
Hansell, G. A., Ph.B.	Penn Military College (1956)

PENNSYLVANIA (Continued)

- *Hughes, W. L., PhD. Temple University (1925)
- *Jones, L. M., PhD. Penn State University (1930) (1)
- *Lawther, J. D., M. A. Penn State University (1951)
- Luehring, F. W., PhD. University of Pennsylvania (1912) (1) (2)
- *McCoy, E. B., M. A. Penn State University (1952)
- Mercer, E. L., M.D., ScD. 133 Ogden, Swarthmore, Pa. (1920) (1) (2)
- *Meredith, W. F., PhD. University of Pennsylvania (1941) (1)
- *Oermann, K. C. H., PhD. University of Pittsburgh (1946)
- Olson, Carl, B. S. University of Pittsburgh (1946)
- Rivero, M., M. A. Lincoln University (1948)
- Runquist, K. C., EdD. Temple University (1954)
- Schott, C. P., PhD. Penn State University (1929) (1) (2)
- Stagg, A. A., Sr., M. A. Susquehanna University (1900) (1) (2)
- Stagg, A. A., Jr., M. A. Susquehanna University (1941)
- Stetson, W. J., M. A. Swarthmore College (1951)
- Stoeber, J. B., M. A. Thiel College (1956)
- *Sturzebecker, R. L., EdD. Westchester State Teachers College (1955)
- *Van Dalen, D. B., PhD. University of Pittsburgh (1946)
- Way, H. P., M.Ed. Allegheny College (1939)
- Winters, A. E., M. A. Lafayette College (1926)

RHODE ISLAND

- *Cieruzo, P. F., Jr., M. A. Rhode Island University (1939)
- *Hefferman, J. M., M.Ed. Brown University (1952)
- Swain, L. E., M. A. 25 Barberry Hill, Providence (1926) (2)

SOUTH CAROLINA

- Dellastatious, J. W., M. S. The Citadel (1956)
- *Fourier, A. E., M. A. University of South Carolina (1951)
- Grugan, J. D., B. A. University of South Carolina (1949)
- Silox, W. A., B. S. College of Charleston (1950)

SOUTH DAKOTA

- Danielsen, E. R., M. A. South Dakota State College (1950)
- Emmerich, J. C., B. S. South Dakota State College (1957)
- Ginn, R. A., M. A. South Dakota State College (1957)
- Goodell, H. B., M. S. South Dakota School of Mines and Tech. (1940)
- Youngworth, C. I., M. A. Yankton College (1956)

TENNESSEE

Brady, G. F., PhD.	University of Tennessee (1955)
Crocker, J. D., M. A.	East Tennessee State College (1955)
*Davis, Jennings, Jr., EdD.	David Lipscomb College (1955)
Eblen, R. H., M. S.	Tennessee Tech (1951)
Hobt, A. W., M. S.	University of Tennessee (1928)
Hyden, J. P., B. S.	Vanderbilt University (1949)(Military Leave)
Overall, P. V., M. S.	Tennessee Polytechnic Institute (1947)
Pangle, R. V., M. E.	George Peabody College (1956)
Patty, E. K., PhD.	Middle Tennessee State College (1947)
Roberts, L. T., M. S.	East Tennessee State College (1955)
Scott, E. B., Jr., Dir. PE.	Memphis State College (1956)
Sudduth, S. B., PhD.	George Peabody College (1951)
Warren, N. L., EdD.	George Peabody College (1956)

TEXAS

Alderson, C. J., EdD.	University of Texas (1950)
Barlow, T. E., B. A.	University of Texas (1953)
Barr, A. R., M. A.	Southern Methodist University (1948)
Bearden, F. W., EdD.	The Rice Institute (1953)
Brace, D. K., PhD.	University of Texas (1924)
Brinley, E. D., EdD.	Texas College of Arts and Industries (1943)
Brown, H. S., EdD.	Southern Methodist University (1947)
Buchanan, H. E., M. A.	Texas Tech (1956)
Hermance, G. L., M. A.	The Rice Institute (1931)
Hester, R. G., M. S.	Austin College (1956)
*Kireilis, R. W., Dir. PE.	Texas Tech (1953)
Landiss, C. W., EdD.	Texas A & M College (1948)
McGraw, L. W., EdD.	University of Texas (1954)
Messersmith, L. L., EdD.	Southern Methodist University (1932)
Mitchem, J. C., PhD.	Prairie View A, & M College (1955)
Segrest, H. B., M. S.	Texas A & M College (1952)
*Weston, Arthur, EdD.	The Rice Institute (1952)
Whitaker, B. M., B. A.	University of Texas (1948)
Wright, G. O., M. S.	Texas College (1956)

UTAH

Bellows, H. A., EdD.	Utah University (1953)
Hart, C. J., EdD.	Brigham Young University (1942)
Hunsaker, H. B., M. S.	Utah State Agricultural College (1948)
Nash, J. B., PhD.	Brigham Young University (1927) (2)

VERMONT

Kelly, J. J., M. A.	Middlebury College (1947)
Post, A. T.	University of Vermont (1936)
Taddonio, D. A., M.Ed.	Castleton State Teachers College (1955)

VIRGINIA

Dyck, P. B., M. A.	Virginia Tech (1946)
Heidloff, R. C., M.PE.	University of Virginia (1934)
Humbert, R. E., EdD.	University of Richmond (1955)
Lord, N. F., B. S.	Washington and Lee University (1949)
*Ludwig, L. T., M.Ed.	University of Virginia (1929)
Slaughter, E. R., B.S.	University of Virginia (1956)

WEST VIRGINIA

*Duncan, R. O., EdD.	University of West Virginia (1952)
*Fox, J. D., M. S.	Potomac State College (1956)
Holter, F. J., Jr., PhD.	University of West Virginia (1932) (1)
Mackey, R. T., M. A.	Sheperd College (1949)
*Sheets, N. L., M. S.	Davis and Elkins (1956)
Yost, C. P., PhD.	University of West Virginia (1956)

WASHINGTON

Bohler, J. F., B. S.	State College of Washington (1928) (2)
Cisek, R. A., B. S.	Western Washington College of Education (1954)
Cutler, R. K., M. S.	University of Washington (1955)
Galligan, G. E., EdD.	Washington State College (1947)
House, H. H., PhD.	Box 203, Asotin, Washington (1932) (2)

WISCONSIN

Denney, A. C., M. A.	Lawrence College (1935)
*Francis, R. J., PhD.	University of Wisconsin (1953)
Mansfield, A. M., M. A.	University of Wisconsin (1953)
Masley, A. L., B. A.	University of Wisconsin (1945)
*Rarick, G. L., PhD.	University of Wisconsin (1951)
*Westkaemper, R. B., EdD.	Wisconsin State College (1956)
Wolf, J. G., PhD.	University of Wisconsin (1950)

HAWAII

Brown, H. E., PhD.	University of Hawaii (1947)
Gustuson, D. I., M. A.	University of Hawaii (1949)
Saake, A. C., EdD.	University of Hawaii (1955)

PUERTO RICO

Furman, D. C., EdD.	University of Puerto Rico (1948)
Mangual, R. A., B. S.	A & M College, Mayaguez, Puerto Rico (1951)
Sambolin, L. F., M. A.	Polytechnic Institute of Puerto Rico (1954)
Torregrosa, F. M., M. S.	University of Puerto Rico (1948)

PHILLIPINES

Bartolome, C. C., M.PE.	University of Phillipines (1950)
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NEW ZEALAND

Smithells, P. A., M. A.	University of Otago, Dunedin (1956)
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CANADA

Blackstock, C. R., B. S.	Pickering College (1948)
Flynn, M. S., B. S.	Sir George Williams College (1955)
Gowie, K. D., B. A.	University of Saskatchewan (1950)
Griffiths, M. G., M. A.	University of Toronto (1952)
Kennedy, W. F., M. A.	University of Manitoba (1951)
Lamb, A. S., M.D.	Box 55, Ste. Anne Debellevue, Quebec (1919) (2)
McCutcheon, J. E.	University of Toronto (1949)
Mitchell, W. F., B. S.	Ontario Agricultural College (1948)
Osborne, R. F., B.Ed.	University of British Columbia (1948)
*Ryan, H. R., B.PE.	McGill University (1950)
Smith, W. D., M. A.	University of Alberta (1949)
Stevens, W. A., M. S.	University of Toronto (1949)
Wipper, K. A. W., B.Ed.	University of Toronto (1957)
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